

# Operating Instructions for Digital Pressure Sensor

Model: HND-PS01...PS08



# HND-PS01...08

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## Manufactured and sold by:

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## 2. Note

Please read these operating instructions before unpacking and putting the unit into operation. Follow the instructions precisely as described herein.

The instruction manuals on our website <a href="www.kobold.com">www.kobold.com</a> are always for currently manufactured version of our products. Due to technical changes, the instruction manuals available online may not always correspond to the product version you have purchased. If you need an instruction manual that corresponds to the purchased product version, you can request it from us free of charge by email (<a href="mailto:info.de@kobold.com">info.de@kobold.com</a>) in PDF format, specifying the relevant invoice number and serial number. If you wish, the operating instructions can also be sent to you by post in paper form against an applicable postage fee.

Operating instructions, data sheet, approvals and further information via the QR code on the device or via <a href="https://www.kobold.com">www.kobold.com</a>

The devices are only to be used, maintained and serviced by persons familiar with these operating instructions and in accordance with local regulations applying to Health & Safety and prevention of accidents.

When used in machines, the measuring unit should be used only when the machines fulfil the EC-machine guidelines.

# 3. Instrument Inspection

Instruments are inspected before shipping and sent out in perfect condition. Should damage to a device be visible, we recommend a thorough inspection of the delivery packaging. In case of damage, please inform your parcel service / forwarding agent immediately, since they are responsible for damages during transit.

#### Scope of delivery:

The standard delivery includes:

• Digital Pressure Sensor model: HND-PS01...PS08

# 4. Regulation Use

Any use of the device, which exceeds the manufacturer's specification, may invalidate its warranty. Therefore, any resulting damage is not the responsibility of the manufacturer. The user assumes all risk for such usage.

The sensors in plastic housing are designed for following application areas:

- air
- non-corrosive, non-ionising gases

#### Hose connection:

Be careful when mounting hoses to the pressure ports!

Press hose on pressure port only in straight direction and without bends – avoid oblique force to the ports, otherwise the ports may get broken. Only use plastic hoses with inner diameter of 4 mm, e.g. 6/4 ( $\emptyset$  6 mm outer /  $\emptyset$  4 mm inner).

# 5. Operating Principle

With the appropriate external pressure sensors, precise measurement results over the entire measuring range can be achieved. Various pressure sensors are available for a multitude of measuring tasks and special applications.

## 6. Mechanical Connection

This device has been designed and tested in accordance with the safety regulations for electronic devices. However, its trouble-free operation and reliability cannot be guaranteed unless the standard safety measures and special safety advises given in this manual will be adhered to when using the device.

- 1. Trouble-free operation and reliability of the device can only be guaranteed if the device is not subjected to any other climatic conditions than those stated under "Specification".
- 2. If the device is transported from a cold to a warm environment condensation may result in a failure of the device. In such a case make sure the device temperature has adjusted to the ambient temperature before trying a new start-up.
- 3. If there is a risk whatsoever involved in running it, the device has to be switched off immediately and to be marked accordingly to avoid re-starting. Operator safety may be at risk if:
  - there is visible damage to the device.
  - the device is not working as specified.
  - the device has been stored under unsuitable conditions for a longer time. In case of doubt, please return device to manufacturer for repair or maintenance.



Warning: Do not use this product as safety or emergency stop device or in any other application where failure of the product could result in personal injury or material damage.

Failure to comply with these instructions could result in death or serious injury and material damage.

4. Any changes or repair of the device is <u>not</u> allowed.

Please return device to manufacturer for repair or maintenance.

# 7. Operation

- a) You must only use the sensor with HND-P-devices (see Datasheet)! Usage of other devices may result in destruction of sensor and device.
- b) Treat sensor and device carefully. Use only in accordance with above specification. (Do not throw, hit against etc.). Protect plug from soiling.
- c) To disconnect pressure sensor do not pull at the cable but at the plug (to open lock).
  - When connecting the sensor make sure that arrows are pointing upwards and that plug is entered into device socket centrally. Do not twist plug when entering socket.
  - If plug is entered correctly, it will slide in smoothly.
  - If plug is twisted or entered incorrectly the connecting pins of the plug can be spoilt by bending or broken => Plug can no longer be used and connecting cable needs to be replaced.
- d) HND-PS01...HND-PS08 (= standard (plastic) pressure sensors): Connection diagram for sensor tube connection:

## For measurements of over pressure (relative pressure sensor):

• Connect plastic tube with internal dia of 4 mm to cable gland "B". Connection "A" will not be used!

## For measurements of pressure differences (relative pressure sensor):

 Connect both plastic tubes with an internal dia of 4 mm to cable gland "B" and "A"; make sure to apply higher pressure to connection "B"

## For measurements of absolute pressure (absolute pressure sensor):

Connect plastic tube with an internal dia of 4 mm to cable gland "A".
 (Cable gland "B" is not used.)

# 8. Technical Information

Operating instructions, data sheet, approvals and further information via the QR code on the device or via <a href="https://www.kobold.com">www.kobold.com</a>

# 9. Order Codes

Operating instructions, data sheet, approvals and further information via the QR code on the device or via <a href="https://www.kobold.com">www.kobold.com</a>

# 10. Dimensions

Operating instructions, data sheet, approvals and further information via the QR code on the device or via <a href="https://www.kobold.com">www.kobold.com</a>

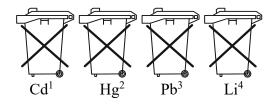
# 11. Disposal

## Note!

- Avoid environmental damage caused by media-contaminated parts
- Dispose of the device and packaging in an environmentally friendly manner
- Comply with applicable national and international disposal regulations and environmental regulations.

#### **Batteries**

Batteries containing pollutants are marked with a sign consisting of a crossed-out garbage can and the chemical symbol (Cd, Hg, Li or Pb) of the heavy metal that is decisive for the classification as containing pollutants:



- 1. "Cd" stands for cadmium
- 2. ,,Hg" stands for mercury
- 3. "Pb" stands for lead
- 4. "Li" stands for lithium

## **Electrical and electronic equipment**



## 12. EU Declaration of Conformance

We, KOBOLD Messring GmbH, Nordring 22-24, 65719 Hofheim, Germany, declare under our sole responsibility that the product:

Digital Pressure Sensor Model: HND-PS01...PS08

to which this declaration relates is in conformity with the following EU directives stated below:

**2014/30/EU** Electromagnetic compatibility

**2011/65/EU RoHS** (category 9)

**2015/863/EU** Delegated Directive (RoHS III)

Also, the following standards are fulfilled:

#### EN 61326-1:2013

Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements

#### EN IEC 63000:2018

Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

Hofheim, 10 October 2023

H. Volz J. Burke

General Manager Compliance Manager