

WISE DPS b

Instructions for Use

20231025
Art. 1546062

Symbol key

Symbols on the machine

This product complies with applicable EU directives



Symbols in this user manual

Warning/Caution!



Application area

The product is a measurement unit designed for comfort ventilation indoors within Swegon's system for demand-controlled ventilation WISE. The product is used to measure duct pressure.

The product may not be used for anything other than its intended use.

General



Read through the entire instructions for use before you install/use the product and save the instructions for future reference. It is not permissible to make changes or modify this product other than those specified in this document.

The packaging contains the following items:

1 x WISE DPS

1 x Instructions for use

Protective equipment



Always use appropriate personal protective equipment for the work in question, in the form of gloves, respirators and protective glasses during handling, installation, cleaning and service/maintenance.

Electrical safety



Permitted voltage, see "Electrical data".

It is not permissible to insert foreign objects into the product's contactor connections or the electronics's ventilation openings; risk for short-circuiting.

Cable sizing must be carried out for cabling between the product and the power supply source.

Disconnect the power supply when working on products that are not required to run in production.

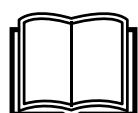
Always follow the local/national rules for who shall be permitted to carry out this type of electrical installation.

Handling

- The product must be handled with care.

Installation

- Moist, cold and aggressive environments must be avoided.
- Avoid installing the product near a heat source.
- Assemble the product according to applicable industry regulations.
- Install the product so that it is not accessible by unauthorized persons, for example above a suspended ceiling.
- Install the product for easy access during service/maintenance.
- If the product is mounted above a fixed ceiling, the inspection hatch must be located so that the product is accessible for inspection.
- If the product is mounted in cold areas, the whole product must be insulated on the outside against condensation.
- The product can be installed position-independent.
- Check to make sure that the product does not have any visible defects.
- Check that the product is properly secured after it has been installed.
- Use the product's eyes to secure the cables with cable ties.
- Check that all cables are properly secured in place after installation.



The document was originally written in Swedish

Installation, dimensions & weight

The duct pressure sensor can be mounted in an optional position in the system to measure the duct pressure.

The hose should be connected “+ (red)” to measure the duct pressure on the supply air and “- (blue)” to measure the duct pressure on the extract air.

To switch between measuring pressure on supply air or extract air, unscrew the quick-fit connector and move to the other connection.

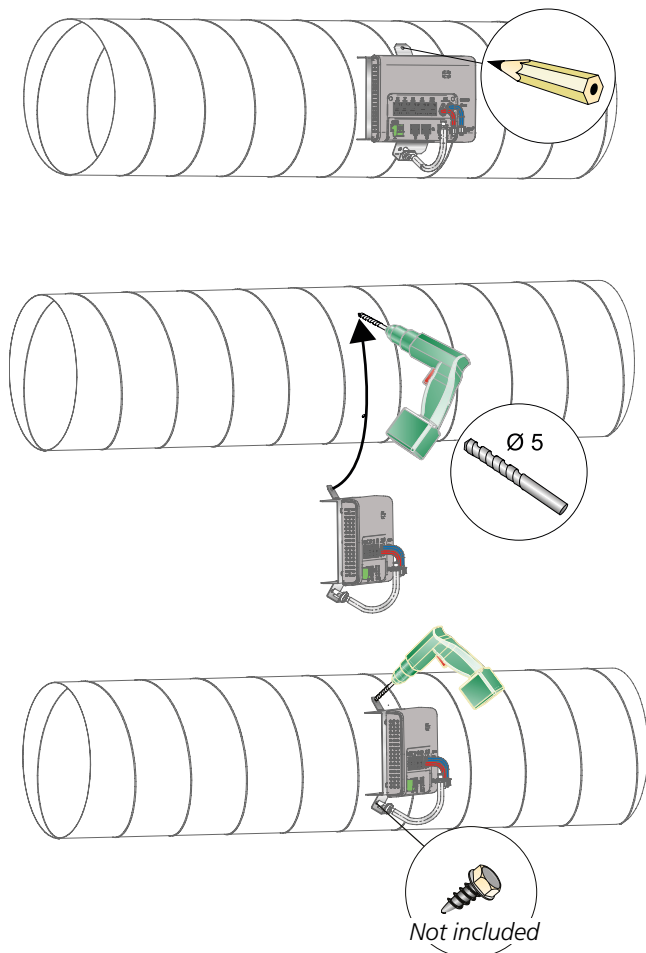


Figure 1. The pressure sensor shelf can be modified to fit the duct on which it is to be mounted, be it circular or rectangular.

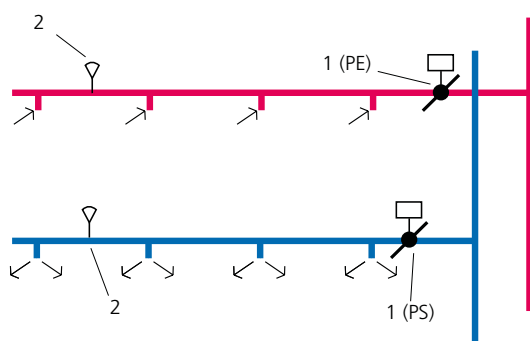


Figure 2. Constant pressure regulation recommended installation 2/3 out in duct.

1. WISE Damper
2. WISE DPS

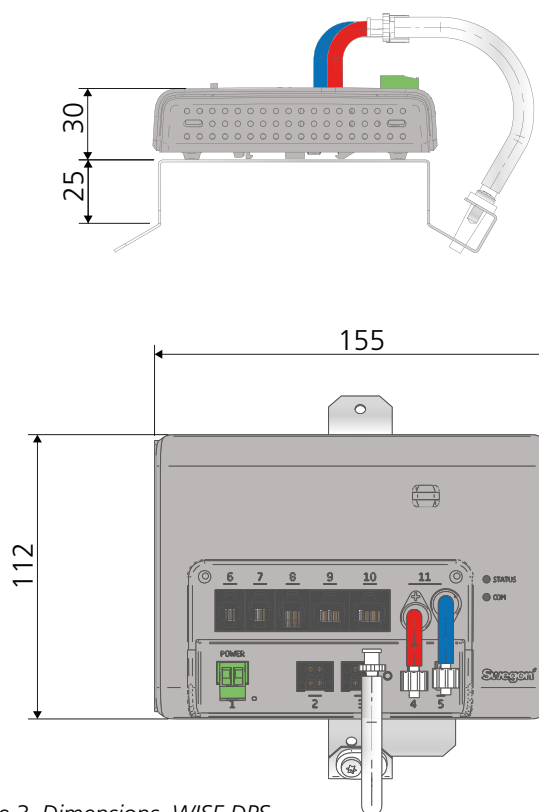


Figure 3. Dimensions, WISE DPS.

Weight (kg)
0.43

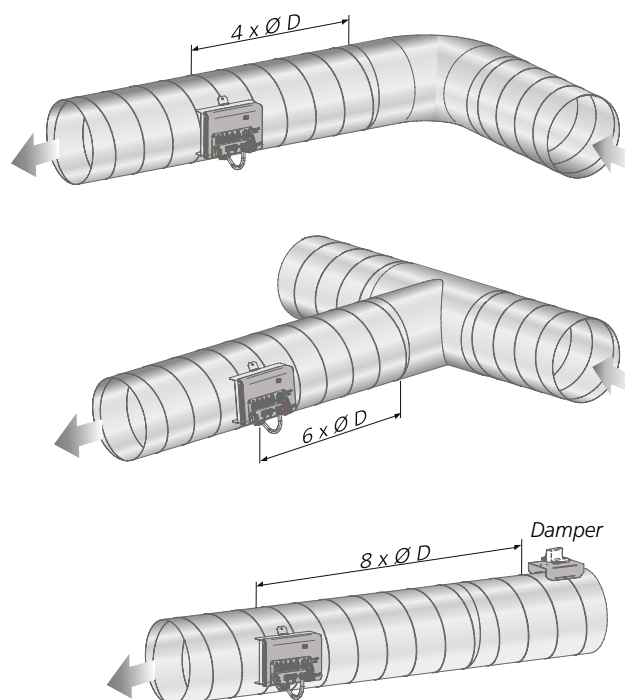


Figure 4. Straight section requirement before WISE DPS.

Connections

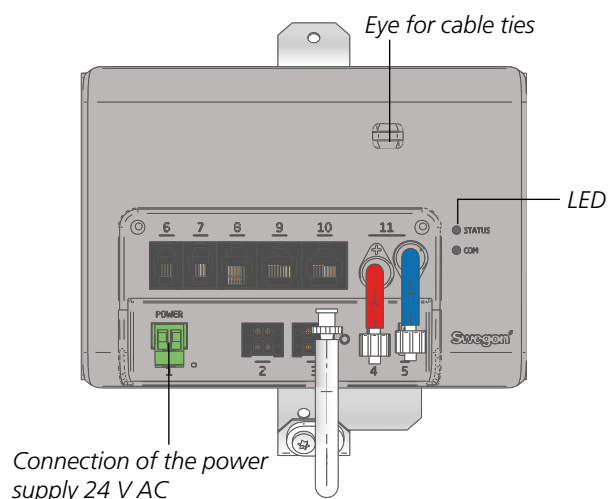


Figure 5. WISE DPS, connection.

LED - Explanation

Not paired

	Colour	Type
Energized	White	Permanent
Selected in TuneWISE	White	Flashing, fast
Prepared to be added to the system	White	Flashing, slowly
To be added to the system	White	Flashing, fast for 5 s

Use

Use TuneWISE for commissioning. Commissioning must be performed by qualified and trained WISE service engineers.

Use SuperWISE for settings, reading alarms, etc. refer to the documentation for SuperWISE II / SuperWISE II SC.

Trouble shooting

The product is not shown in the system

- Make sure that the product is energized.
- Make sure that the product is paired.
- Make sure the product is in the right radio network.

The product shows incorrect/no pressure

- Make sure that the product is installed according to the recommended distance to disruptions, see "Installation".
- Check that there is pressure.
- Check that the measuring tubes are mounted correctly.
- Check that the measuring tubes are undamaged.

Cleaning

Ideally, the product should be cleaned in connection with the cleaning of the rest of the ventilation system.

Cleaning of electrical components

- If needed, use a dry cloth to clean the components.
- Never use water, detergent and cleaning solvent or a vacuum cleaner.

Service/maintenance

- The product does not require any maintenance, except for any cleaning when necessary.
- In connection with a service, mandatory ventilation inspection or cleaning of the ventilation system, check that the general condition of the product appears to be good. Pay particular attention to the suspension, cables and that they sit firmly in place.
- It is not permissible to open or repair electrical components.
- If you suspect that the product or a component is defective, please contact Swegon.
- A defective product or component must be replaced by an original spare part from Swegon.

Materials and surface treatment

- All sheet-metal parts are galvanized sheet steel (Z275).
- The pressure sensor casing is made of ABS plastic.

Disposal

Waste must be handled according to local regulations.

Product warranty

The product warranty or service agreement will not be valid/will not be extended if: (1) the product is repaired, modified or changed, unless such repair, modification or change has been approved by Swegon AB; or (2) the serial number on the product has been made illegible or is missing.

Technical data

Frequency band:	2.45 GHz
IMS band (2400–2483 MHz)	
Output (ERP):	50 mW
Range of measurement	
Pressure:	0 – 300 Pa
IP class:	IP20
Ambient temperature	
Operation:	0 – 50°C
Storage:	-20 – +50°C
RH:	10 – 95% (non-condensing)

Electrical data

Power supply:	24V AC $\pm 10\%$ 50-60 Hz
Max. power consumption:	2 VA
Cable rating, connector:	Power: max. 2.5mm ²

Declaration of Conformity

Swegon AB hereby affirms that:

WISE DPS complies with the essential characteristic demands and relevant regulations specified in the following directives: 2014/53/EU (RED) and 2011/65/EU (RoHS2):

The following standards have been observed:

IEC 60529:1992+A2:2013	Degrees of protection provided by enclosures (IP code)
EN 61000-6-2:2007	Electromagnetic compatibility (EMC). Generic standards. Immunity for industrial environments
EN 61000-6-3:2007	Electromagnetic compatibility (EMC). Generic standards. Emission standard for residential, commercial and light-industrial environments
EN 300328 V1.9.2, V1.9.1, V1.8.1	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Wideband Transmission systems - Data transmission equipment operating in the 2.4 GHz ISM band and using spread spectrum modulation techniques



Person responsible for this declaration:

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Date: 200325

Name: Freddie Hansson, R&D Manager

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Date: 200325

This declaration is applicable only if the product has been installed according to the instructions in this document and if no modifications or changes have been made on this product.

References

www.swegon.com

Building Materials Declaration

WISE DPS product data sheet

WISE System Guide

WISE User Manual

WISE Project Planning Guide - Electricity & control

WISE Project Planning Guide - Heating, cooling & ventilation