

DPS Series

Differential Pressure Switch

20250911R1

Technical Catalogue



The HAVKON DPS Series differential pressure switches are designed for monitoring air filters, detecting fan operation, and identifying belt-break conditions in heating, cooling, and ventilation systems. The series includes four models with different pressure ranges, allowing precise adjustment for a wide variety of applications.

Thanks to their broad range options, DPS switches can be used with dry, clean, and non-aggressive gases (typically air). They are suitable for air conditioning units, clean room systems, ventilation ducts, laboratory overpressure control, and fan or filter monitoring applications

Features

- Adjustable differential pressure setpoint for HVAC monitoring
- SPDT (NO/NC) contact output for direct control or alarm functions
- Designed for use with clean, dry, non-aggressive gases
- Available in four pressure range models to meet different system needs
- Compact and lightweight design for easy mounting
- Durable mechanical switching structure with long service life

Typical Applications

- Air filter monitoring in ventilation and HVAC systems
- Fan and blower operation detection
- Belt-break or airflow failure monitoring
- Clean room pressure control and room pressurization
- Differential pressure monitoring in ducts and air handling units
- Laboratory and medical facility overpressure supervision

Order Codes

Codes	Pressure Range	Descriptions
DPS.02	20–200 Pa	Low-range differential pressure switch
DPS.05	50–500 Pa	Medium-range differential pressure switch
DPS.10	200–1000 Pa	Mid-high range differential pressure switch
DPS.25	500–2500 Pa	High-range differential pressure switch

Warnings



Before starting the installation of the device, carefully read the user manual and the warnings below.

The user is responsible for any damage, loss, or personal injury resulting from failure to comply with the warnings in this manual. Do not modify or attempt to repair the device. Any intervention on the device may cause malfunction, damage to the device or the system.

In such cases, the device will be excluded from the warranty coverage.

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Technical Specifications

Electrical Specifications	Contact Type	SPDT (NO / NC)
	Contact Rating	Max. 1.5 A @ 250 VAC / 0.4 A @ 30 VDC
	Electrical Connection	6.3 mm Faston terminals
Pressure / Performance	Pressure Medium	Dry, clean, non-aggressive gases (typically air)
	Setpoint Adjustment	Manual screw adjustment
	Setpoint Tolerance	±15% of full scale
	Switching Difference (Hysteresis)	Fixed mechanical differential
	Maximum Operating Pressure	10 kPa (model dependent if different)
	Repeatability	High mechanical repeatability over service life
Environmental Conditions	Operating Temperature	-20...+85 °C
	Storage Temperature	-40...+85 °C
	Humidity	< 95% RH (non-condensing)
	Protection Class	IP54 (with cover installed)
Materials / Constructions	Housing	ABS
	Diaphragm Material	Silicone
	Mounting	Wall or duct mounting
	Pressure Connections	Φ6 mm hose connectors
Dimensions / Weight	Enclosure Size	W105 x H86 x D60 (mm) (<i>Width x Height x Depth</i>)
	Weight	200 gr.

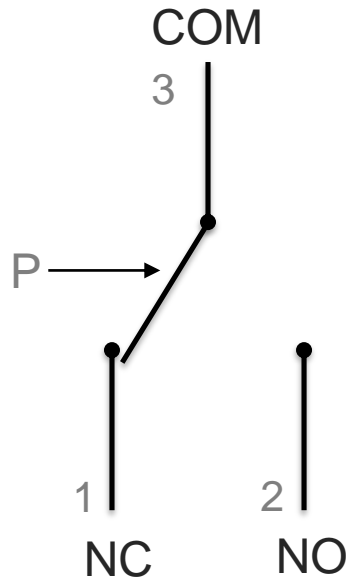
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Wiring Diagram



When the differential pressure exceeds the setpoint, the Common (3) terminal switches to the Normally Open (2) terminal.

When the differential pressure is below the setpoint, the Common (3) terminal switches to the Normally Closed (1) terminal.

Contact Definitions

Terminal	Function	Description
1	NC (Normally Closed)	Connected to COM when pressure is below setpoint
2	NO (Normally Open)	Connected to COM when pressure is above setpoint
3	COM (Common)	Switching reference terminal

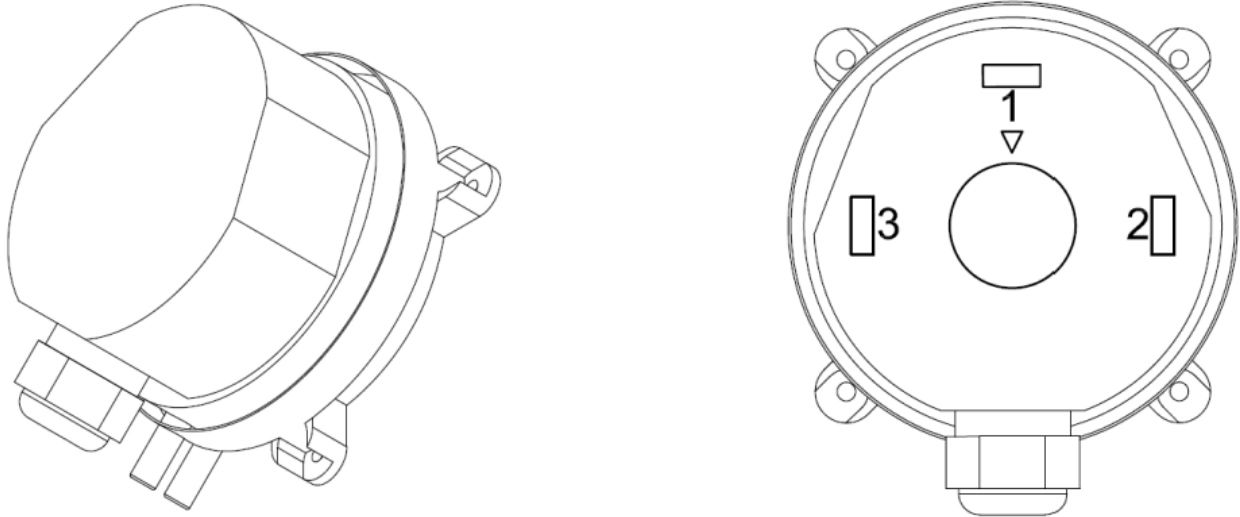
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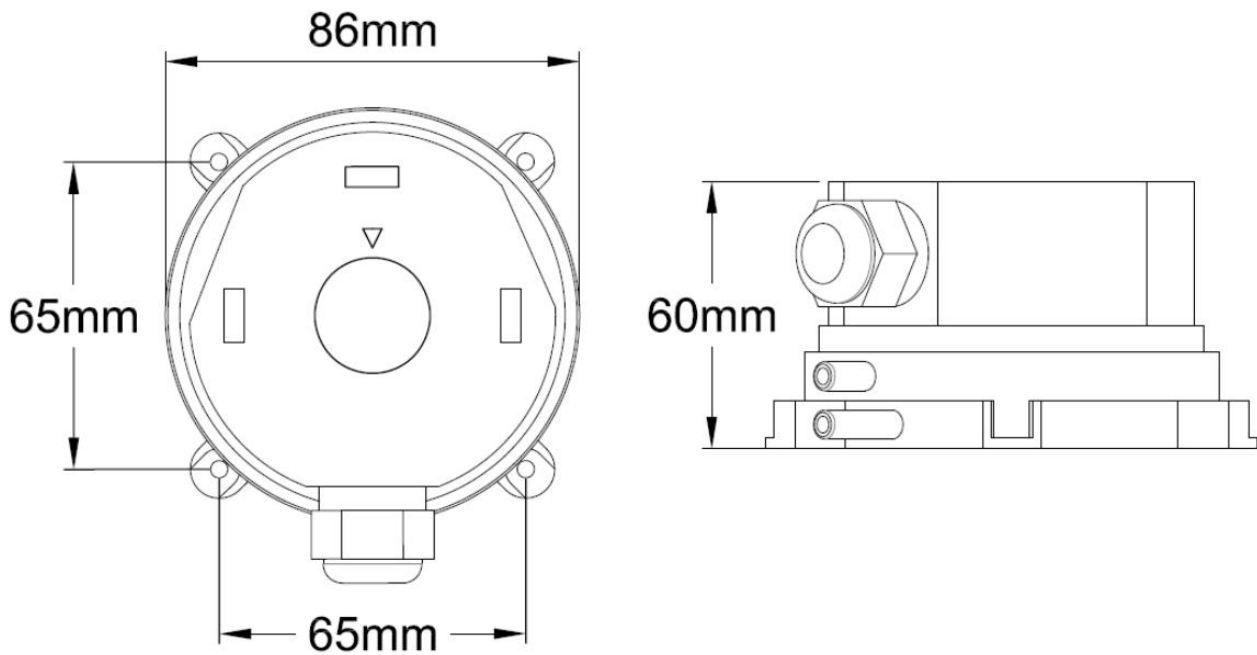
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Device Overview



Dimensions



Important Notes

- Dimensions are given in millimeters (mm).
- Self-extinguishing plastics are used in the device enclosure.
- **Do not clean the device with solvent liquids** such as thinner, benzene, acidic or abrasive chemicals.
- Maintain the enclosure cover closed during operation to ensure correct IP protection.
- Avoid installing the device in areas with excessive vibration or strong airflow turbulence.

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Package Included

- 1 × DPS differential pressure switch
- 1 × Installation and user manual
- 1 meter silicone hose
- 2 × Plastic mounting fasteners
- 2 × Screws

Safety Instructions



- The device must be installed and operated **in accordance with this manual**.
- All wiring must be performed with the **power supply disconnected**.
- Use the device only with **clean, dry, and non-aggressive gases**.
- Protect the device from **moisture, dust, vibration**, and excessive airflow turbulence.
- Ensure that the **cover is properly closed** during operation to maintain **IP54 protection**.
- Pressure tubing must be routed without **sharp bends, kinks, or obstruction**.
- Installation and electrical connections must be carried out by **qualified personnel**.
- Do not exceed the **maximum operating pressure** specified for the device.
- Do not clean the device with **solvent liquids** (such as thinner, benzene, acidic or abrasive chemicals).
- Power supply and switching circuits must comply with **relevant electrical safety standards**.