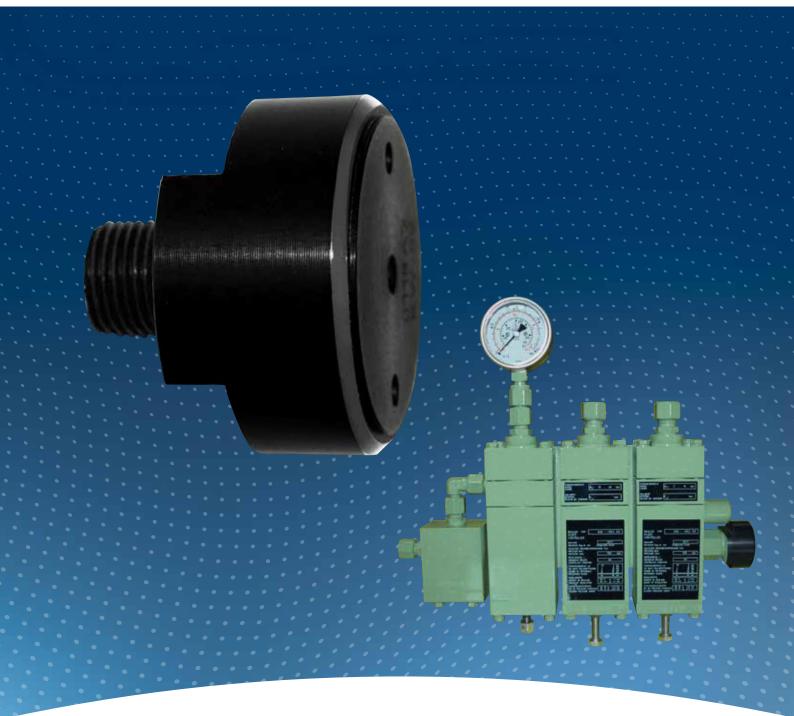
Vent valve HON 915



PRODUCT INFORMATION

Serving the Gas Industry Worldwide



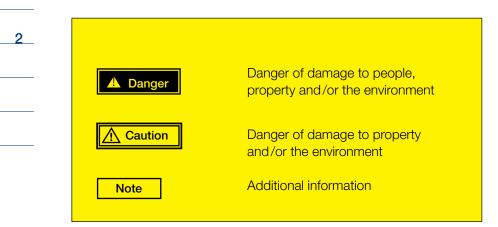
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Legends

EYE catchers - warnings against dangers

In this manual, safety information is highlighted by means of the following **signal words** and/or **symbols**:

General warnings



Application, properties, technical specifications

Applications

- Replaces vent lines to atmosphere.
- For protecting installation spaces against gas leakages from measuring diaphragms, e. g. gas pressure regulators and safety shut-off valves.
- As a protection against diaphragm failures (version "A" according to (DIN) EN 14382) on direct-acting actuators in connection with "SSV underpressure shut-off".

Characteristics

- This vent valve has been registered according to PED-CE and GAD-CE for applications with Honeywell equipment. According to (DIN) EN 334/14382, this vent valve is an integral component of such other Honeywell devices.
- Optional SEP design.
- In the event of a measuring diaphragm failure of a gas pressure regulator or safety shut-off valve, this vent valve will limit the max. gas leakage to 30 l/h, < 70 l/h and < 150 l/h (with reference to normal air).
- Easy installation: simply screw into the vent line connection of the device. Be sure to properly consider the mounting situation (fig. 1).

Specifications	
Max. admissible pressure PS	100 bar
Max. operating pressure p _{max}	100 bar
Flow-rate limit-value regulation Q _{n max}	\leq 30 l/h, < 70 l/h, < 150 l/h (with reference to normal air) Depending on concrete application, take due account of hazard zones according to DVGW G 491 (A)!
Connection	G 3/8, G 1/2 or M 16 x 1.5
Materials	Body parts:Al alloyDiaphragm:NBRO ring:NBRSpring:spring steel
Ambient and operating temperatures	−20 °C to +60 °C
Strength - leak proofness - functionality	According to (DIN) EN 334 and (DIN) EN 14382
CE registration according to PED and GAD	Type-tested for applications with Honeywell devices
SEP registration according to PED	Homeywell
Explosion protection	All mechanical components of this device are without potential ignition sources and/or hot faces. They are not subject to ATEX 95 (94/9/EC). All electronic accessories, on the other hand, meet ATEX requirements.

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Vent valve HON 915

Design and operation

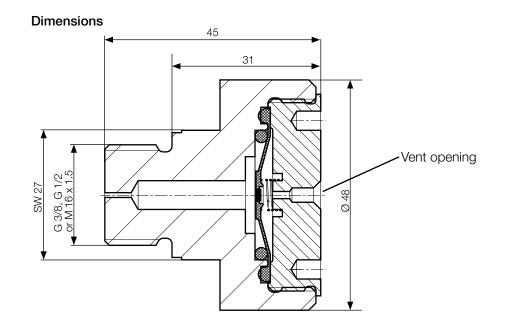


Fig 1: Mounting dimensions + situation

Note

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Recommended installation on gas pressure regulators and safety shut-off valves with vent valve with horizontal centre axis.

DVGW G 491 (A) allows to equip measuring diaphragm assemblies of gas pressure regulators and safety shut-off valves with a vent valve with appropriate flow-rate limitation $Q_{n max}$ instead of vent lines to atmosphere. The vent valve will then prevent leakage of natural gas (DVGW G 260 (A)) to the installation space. The type of vent valve to be selected (flow-rate limitation $Q_{n max}$) will depend on the explosion-protection (hazard) zone (see DVGW G 491 (A)).

Caution

The installation of a vent valve may not always be possible due to the prevailing dynamics inside the regulating line. This depends on the type of measuring diaphragm assembly and its possible adjustments.

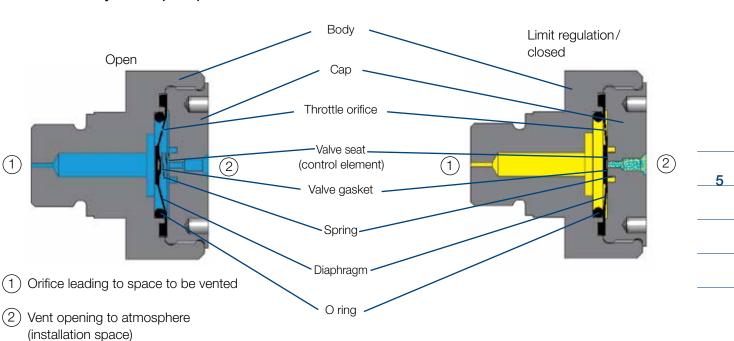
▲ Caution

The vent opening must be open at all times. Do not overpaint.

Note

Use with SSV main valves: HON 672, 673, 674 \rightarrow admissible Use with pilots of pilot-operated regulators \rightarrow admissible Use with regulating units of direct-acting regulators:

- regulators with low dynamics -- possible to a certain extent
- dynamic and highly dynamic regulating lines -- NOT admissible



Vent valve - layout and principle of function

Fig 2: Vent valve in positions "open" and "closed"

The vent valve consists of a body, cap, diaphragm, O ring and spring. It is either open – i. e. it works in flow-rate regulation mode $Q_{n max}$ – or it's closed. In the idle state, the force of the spring will lift the valve gasket (which is connected to the diaphragm) off the valve seat. With the control element so opened and the throttle orifice in the diaphragm, there is now an open connection between the space that must be vented and the atmosphere of the installation space.

Routine adjustments by the measuring diaphragm assembly of the gas pressure regulator/SSV – or a defective diaphragm – will generate a pressure difference at the throttle orifice which will push the gasket against the seat, thus initiating regulation of the flow rate ($Q_{n max}$). The surface of the diaphragm, the orifice and the force of the spring are synchronised in such a way that the pre-set limit value for the flow rate $Q_{n max}$ will not be exceeded.

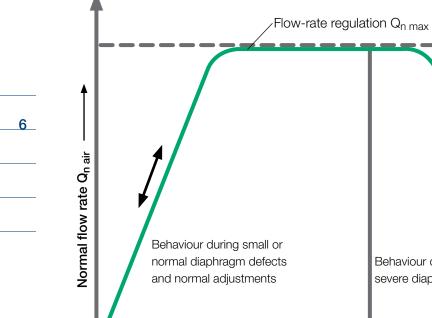
Caution

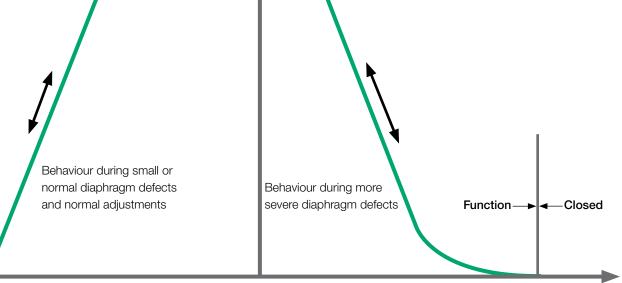
Very fast adjustments of the measuring diaphragm assembly may lead to a short pressure peak in the space to be vented, due to the $Q_{n max}$ flow limitation. However, the venting processes " $Q_{n max}$ regulation" will not be affected.

Note

The HON 915 vent valve will always guarantee proper venting and maintenance of the set value in the 'setpoint-spring space' above the assembly.

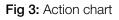
However, if the pressure should rise due to a defective diaphragm and increase beyond about 0.5 bar, the valve will close completely and for good (fig. 3). The pressure in the space to be vented will then increase to p_{max} (which could be e.g. the response value of an SSV).





Flow-rate limit value Qn max

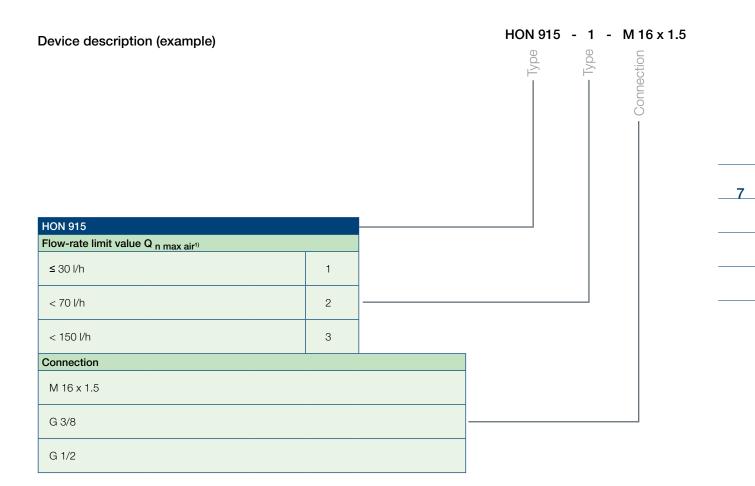
Pressure p - e. g. in setpoint-spring space of measuring diaphragm assembly



Note

When mounting this vent valve on Honeywell devices (gas pressure regulators or safety shut-off valves), be sure to take due account of prevailing installation conditions (see TI 57).

Device description



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¹⁾ Be sure to comply with explosion protection according to DVGW G 491(A).

For More Information

To learn more about Honeywell's Advanced Gas Solutions, visit www.honeywellprocess.com or contact your Honeywell account manager

GERMANY

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