# **Safety Relief Valve HON 832**



## **Serving the Gas Industry** Worldwide



#### **SAFETY RELIEF VALVE HON 832**

Application, characteristics, technical data

## Application

- As leak gas SRV with internal vent connection (function class B in accordance with DIN 33821)
- Variant as proportional SRV with autonomous vent connection (function class A in accordance with DIN 33821)
- For systems in municipal applications and industrial operations
- Leak gas SRV type "B", e. g. for blowing off gas leakages downstream of gas pressure regulators to prevent the SSV from tripping by accident in the event of gas pressure regulator leaks due to consumer zero droop
- Can be used for gases in accordance with DVGW Worksheet G 260 and neutral, non-aggressive gases; other gases on request

#### Characteristics

- Simple, compact design
- Position-independent installation
- Safe operation
- High actuating accuracy
- Integrated vent line for use as leak gas SRV (type "B")

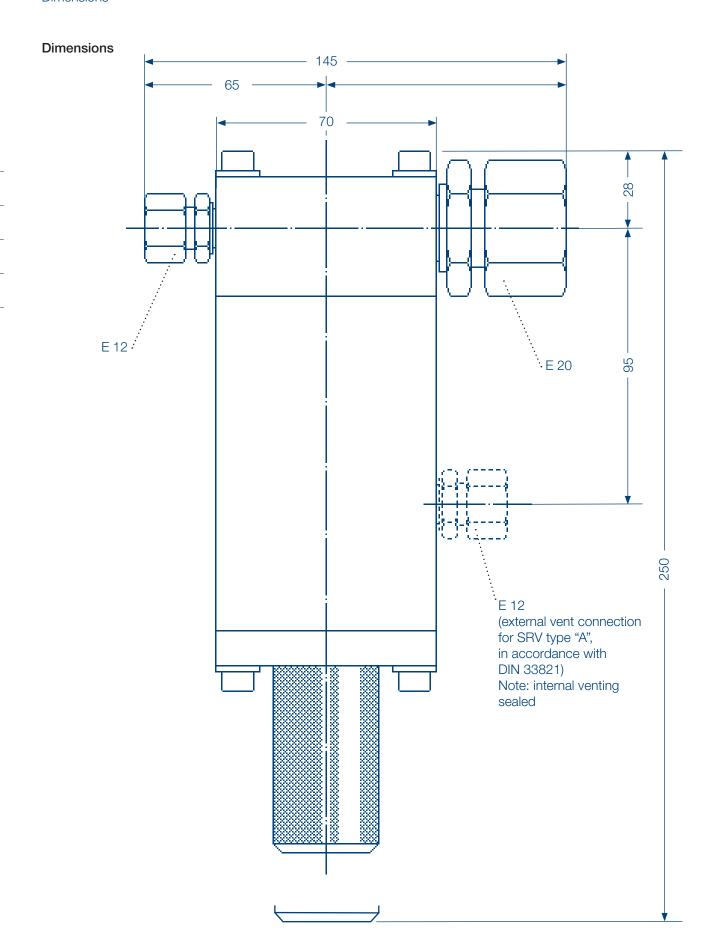
Device-specific operating instructions, maintenance instructions, spare parts drawings, and spare parts lists are provided in the brochure "Operating and Maintenance Manual/Spare Parts List 832.20".

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TECHNICAL DATA						
Max. permissible pressure PS		100 bar				
Max. operating pressure p <sub>max</sub>		100 bar				
Specific pressure range W <sub>us</sub> and accuracy class AC		Setpoint spring			Specific pressure range	Accuracy class AC
		No. Colour Wire Ø		Wire Ø	W <sub>us</sub> in bar	, local acy class / lo
		1 2 3 4 5	grey yellow brown red green	5 5.6 6.3 7 □8/7*	0.5 to 2 1 to 4 2 to 8 4 to 16 12 to 30	5/2.5 2.5/1 2.5/1 2.5/1 2.5/1
Valve seat diameter		8 mm				
Valve flow rate coefficient KG:		32 m <sup>3</sup> /(h · bar)				
Connection		Pipe connections according to DIN EN ISO 8434-1 (DIN 2353), PN 100 for pipe outer diameters: Inlet: 12 mm Outlet: 16 mm, 20 mm, 25 mm, 28 mm				
Spring compartment venting	<ul><li>Leak gas SRV</li><li>type "B"</li><li>Proportional SRV</li><li>type "A"</li></ul>	Internal via vent line Autonomous vent connection with pipe outer diameter 12 mm				
Material	Main valve body Spring housing Measuring diaphragm Valve trim	Aluminium alloy Aluminium alloy NBR (Perbunan) FKM				
Weight		Approx. 3 kg				
Temperature range		−20 °C to +60 °C				
SEP design in accordance with PED		Honeywell sprach RD Art. 3 Abs. 3				
Function and strength		In accordance with DIN 33821				
ATEX		The mechanical components of the device do not have any potential ignition sources, and thus are not subject to ATEX 95 (94/9/EC). Electronic components attached on the device satisfy the ATEX requirements.				

<sup>\*)</sup>  $\square$  = vertical cross section

Dimensions



#### **SAFETY RELIEF VALVE HON 832**

Structure and mode of operation

A safety relief valve (SRV) has the task of autonomously releasing a gas flow from a pressurised line, as soon as the pressure in the system to be safeguarded reaches the set response pressure through increasing increments. The SRV closes again when the pressure in the system to be safeguarded drops below the closing pressure.

The Safety relief valve HON 832 is a directly acting device (works without auxiliary energy) with spring loading.

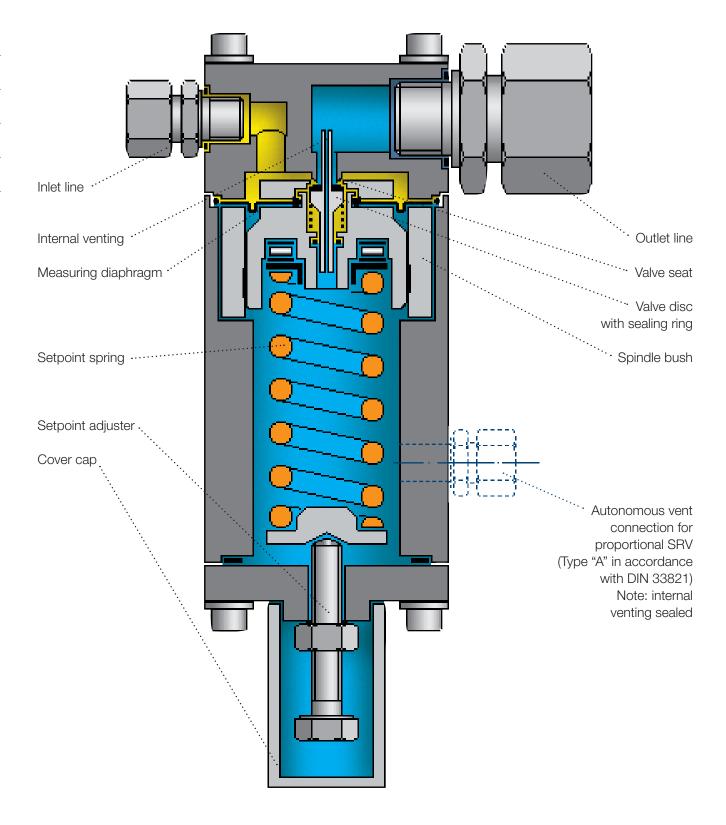
The safety device is designed in two variants: as leak gas SRV and as proportional SRV. When the device is used as a leak gas SRV (type "B" in accordance with 33821) the spring space is vented internally via the vent line. When the device is used as a proportional SRV (type "A" in accordance with DIN 33821) on the spring housing a connection piece is arranged for the autonomous vent line to the free atmosphere.

The pressure to be monitored on the inlet side (actual value) is switched internally and compared with the specified force of the adjustable setpoint spring. If the pressure in the system to be safeguarded exceeds the set response pressure, the main valve opens and allows the excess gas to flow off via the outlet line. The safety relief valve closes again automatically when the pressure of the system to be safeguarded drops below the response pressure of the SRV.

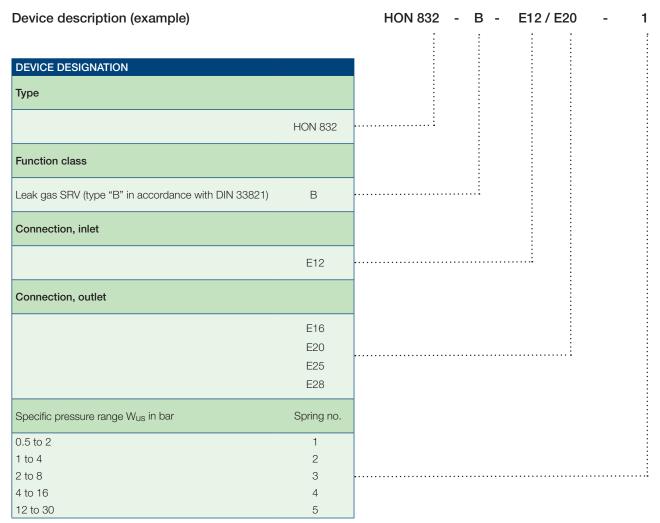
The lateral forces that occur due to the setpoint spring are dissipated directly to the housing via the guide bush. This ensures a high reproducible response accuracy.

The valve piston of the main valve is force-relieved through a control spring. Through this measure the valve trim is protected against impermissible stress. The measuring diaphragm is formed as a bead-moulded diaphragm. This means that the high actuating accuracy of the device is also ensured at lower operating temperatures.

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<sup>\*</sup>Optionally with internal and external vent connection

### For More Information

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

#### **GERMANY**

## **Honeywell Process Solutions**

Honeywell Gas Technologies GmbH Osterholzstrasse 45 34123 Kassel, Deutschland

Tel: +49 (0)561 5007-0 Fax: +49 (0)561 5007-107

