



Description

Intermittent blowdown valve with hand-lever operation, with rapid-closing mechanism and locking device. Packed stuffing box, for retightening.

Application for land or marine boilers, waste-heat boilers, e. g. Quench coolers.

Range

Max. service ... barg...	250	227	110
pressure psig...	3625	3290	1600
Max. temperature °C...	120	400	525

Installation

1. Before installing valve clear all coarse debris from boiler standpipe.
2. Flow in the direction of arrow (indicated on valve body).
3. The operating lever – normally positioned in flow direction – can be repositioned by turning the valve head through 90°, 180° or 270°.
The lever extension can be placed in vertical or horizontal position.
4. Conversion from straight-through to angle valve possible.
5. Provide a rigid anchorage for blowdown line and blowdown valve. Install valve so that the danger of scalding during valve operation is avoided.

Commissioning

In new plants impurities, such as rust particles, welding scale or metal chips might block the blowdown line upstream of the blowdown valve in a very short time.

It is therefore necessary to blow down immediately after filling the boiler and at least every 15 minutes during the first start-up process. Afterwards blowdown should be effected at the regular intervals determined (see section "Operation").

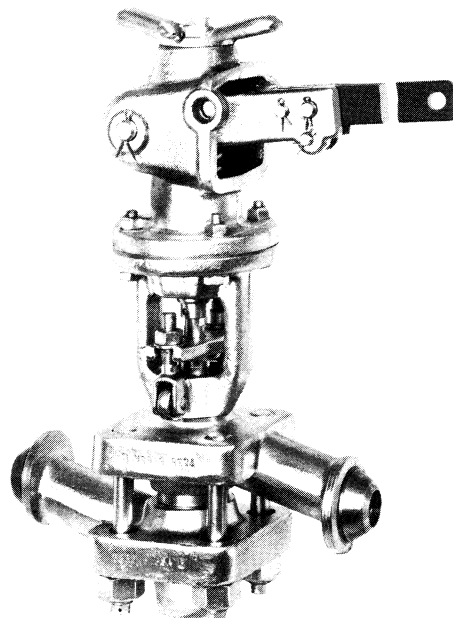
Operation

To block the **closed position** of the valve turn toggle handle completely to the right. To block the **open position** press down operating lever and place a bolt through the eye provided in the valve head.

The valves are opened by pressing down the operating lever (for 3 to 4 seconds). The lever should be moved to its fullest extent. The valves are automatically closed by the inbuilt spring on release of the lever. For reasons of safety, never let go lever.

Should the valve not close fully, the lever should be operated several times to clear the obstruction.

An effective blowdown period – opening period of the valve – should not exceed 3-4 seconds. The opening periods have to be individually calculated for each boiler (see data sheet PA 110 or boiler manufacturers' specifications).



A₃

Blowdown Valves
PN 250
DN 25 mm (1")

PA 110



GESTRA

AKTIENGESELLSCHAFT

P.O. Box 10 54 60, D-28054 Bremen
Hemmstraße 130, D-28215 Bremen
Tel. (4 21) 35 03-0 · Fax (4 21) 35 03-393 · Tx 2 44 945 gbd

Repositioning of Valve Head (Operating lever)

1. Isolate the valve from pressure. Turn toggle handle **2.4** completely to the left into normal operating position. Unscrew four nuts **16** and remove hexagonal bolts **15**.
2. While bearing down on operating lever **10** (so that valve cone **5** lifts off valve seat **4**) turn valve head **2.1** into desired position (through 90°, 180° or 270°).
3. Insert bolts **15**, screw on nuts **16** tighten in diagonally opposite pairs with a torque wrench (22 Nm).

Conversion to Angle Valve

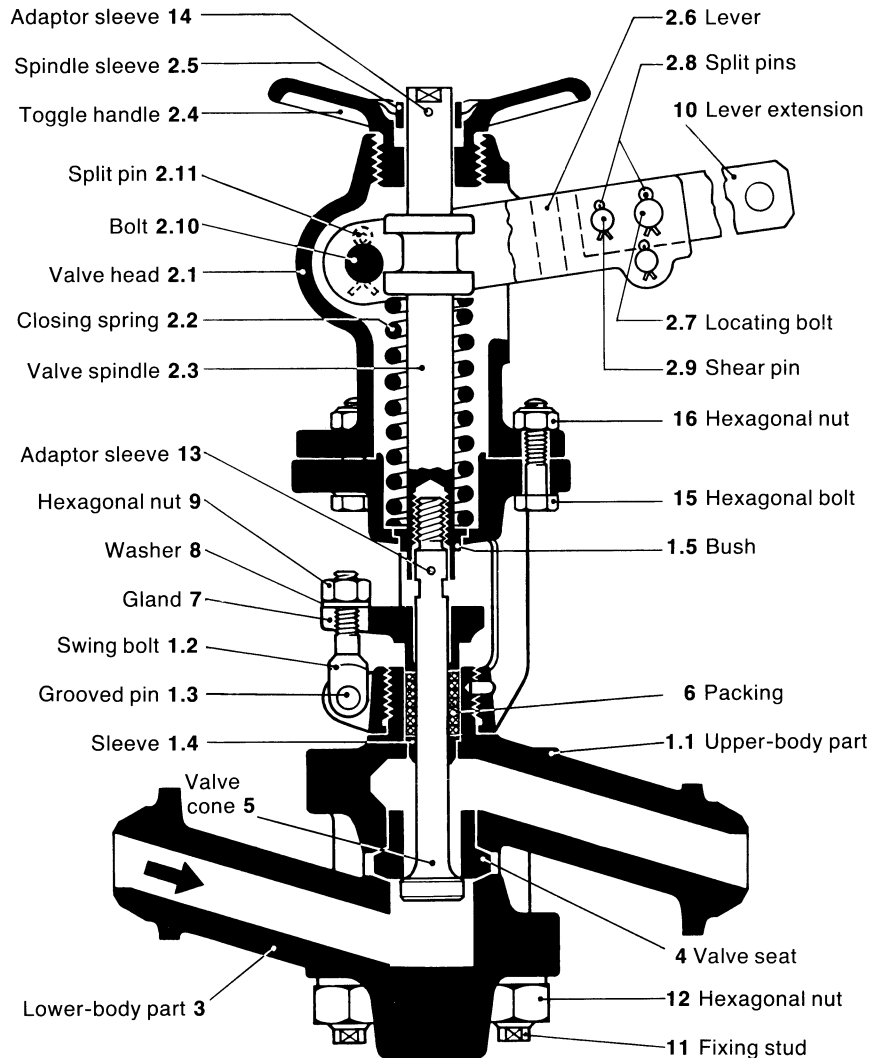
1. Isolate the valve from pressure. Unscrew hexagonal nuts **12**. Reposition lower-body part **3**.
2. Screw on nuts **12** again and tighten in diagonally opposite pairs with a torque wrench (225 Nm).

Parts Subject to Wear

Parts No.	Designation	Number
2.9	Shear pin	2
4	Valve seat	1
5	Valve cone	1
6	Packing ring	1

Maintenance

All moving parts should occasionally be greased, e. g. with steam cylinder oil.



Technical modifications reserved.



Addition to Installation Instructions

Usage for the intended purpose

- a) Steam Traps: BK 27 N, GK 11, GK 21, TK 23, TK 24, UNA 27h, UNA 39, UNA PN 25, UNA Special
Use steam traps only for the discharge of condensed water in steam lines. Observe the admissible pressure/temperature ratings and technical specifications, taking the chemical suitability and corrosion resistance of the pressure equipment into account.
- b) Strainers: SZ 26 A
Use strainer SZ 26 A only for fluids of group 2 (not dangerous) to filter out solid impurities and dirt particles from steam and condensate lines. Observe admissible pressure/temperature ratings and technical specifications, taking the chemical suitability and corrosion resistance of the pressure equipment into account.
- c) Sightglass: VK 16
Use sightglass VK 16 only for fluids of group 2 (not dangerous) for visual readings of condensate levels in steam/condensate lines. Observe admissible pressure/temperature ratings and technical specifications, taking the chemical suitability and corrosion resistance of the pressure equipment into account.
- d) Intermittent and continuous boiler blowdown valves: BA, BAE, MPA, PA
Use boiler blowdown valves only for removing a portion of boiler water to reduce the total dissolved solids (TDS) concentration or to discharge sludge in blowdown lines. Observe admissible pressure/temperature ratings and technical specifications, taking the chemical suitability and corrosion resistance of the pressure equipment into account.

Chemical Resistance

The wear and corrosion resistance of the equipment has to be verified for the application in question. Special caution should be taken when handling hazardous materials. In case of doubt contact the manufacturer for specific recommendations regarding the chemical suitability of the equipment.

Safety Note

GESTRA equipment may only be installed by qualified staff.

Qualified staff are those persons who – through adequate training in engineering, the use and application of equipment in accordance with regulations concerning steam systems, and first aid and accident prevention – have achieved a recognised level of competence appropriate to the installation and commissioning of the device.

Danger



The valve is under pressure during operation.

When loosening flanged connections or sealing plugs hot water, steam, corrosive liquids or toxic gases may escape. This presents the danger of severe burns and scalds to the whole body or severe cases of poisoning. Installation and maintenance work should only be carried out when the system is depressurized.

The valve becomes hot or extremely cold during operation. This presents the risk of severe burns to hands and arms. Installation and maintenance work should only be carried out at room temperatures.

Sharp edges on internals present a danger of cuts to hands. Always wear industrial gloves for installation and maintenance work.

If required, ask for the Declaration of Conformity covering the product in question at gestra.gmbh@gestra.de.
Please note that not all valves have to bear the CE marking.



GESTRA GmbH

P.O.B. 10 54 60, D-28054 Bremen • Münchener Str. 77, D-28215 Bremen
Tel. +49 (0) 421 35 03 - 0, Fax +49 (0) 421 35 03 - 393 • E-mail gestra.gmbh@gestra.de, Internet www.gestra.de



Flow Control Division