

■ Maintenance and reparation

- Maintenance of the armature is not necessary
- Carry out maintenance, reparation and dismounting of accessories according to the operation manual from the manufacturer of the accessories
- Reparation and disassembly of the ball valve may only be carried out by the manufacturer

■ Dismounting from plant

- Discharge pressure of the plant and lower media temperature down to room temperature
- Turn ball valve into an open position
- Dismounting from plant only by professionals

■ Kv values

Kv values of the individual nominal sizes of			
DN	Kv [m ³ /h]	DN	Kv [m ³ /h]
15	36,7	65	512
20	65,3	80	1045
25	102	100	1633
32	167	125	2552
40	261	150	3674
50	408	200/250	6532

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Operation manual and assembly instruction for ball valve



Type
KH-F

■ Correct and proper use

Ball valve for manual shutting off gas in accordance with DVGW code of practice G260, DIN EN 437, air and water, light and heavy fuel oil.

The ball valves are suitable without special measures only for the installation within buildings.

Please take the technical informations from the declaration of conformity and the type sign

■ Operation, handling

Open and close the valve in each case by 90° switching path until it stops





Safety instructions

Source of danger	Consequences	Preventive measure
Demands because of overpressure and temperature	Internal and external leakage, break-up of the ballvalve	Keep attention on maximum allowed operating pressure and temperature
Increase of pressure because of thermal expansion	Internal and external leakage, break-up of the ballvalve	Safety devices are necessary in order to avoid pressure exceeding
Demands and requirements by aggressive medium	Internal and external leakage, break-up of the ballvalve	Note the resistance tables
Demands and requirements by corrosion	Internal and external leakage, break-up of the ballvalve	If corrosion is to be expected, inspect the wall thickness of the endangered parts regularly
Demands and requirements by erosion	Internal and external leakage, break-up of the ballvalve	Lower flow velocity; If erosion is to be expected, inspect the wall thickness of the endangered parts regularly
Influences from the environment of the plant	External leakage; break of the fittings	Decrease reaction forces of pipelines, fixings, filling weights, wind, earth quakes, etc. protect from being hit while mounted overground or covered with earth
Demands in case of fire	Internal and external leakage, break-up of the ballvalve	Protect endangered parts, e. g. by safe distance or by fire protection insulation
When ballvalve is used as an outlet valve	If not proper used, risk of injury by leakage of media	Install safety devices against uncontrolled opening; keep safe distance; operation only by authorized professionals
While working in pipe systems with automatic ballvalves, risk of uncontrolled operation	Media flow may accidentally be freed or shut off	Turn off controlling energy of the actuators and mind the operation manual of the attachment parts

Work on gas installations must be performed by authorised specialists with appropriate qualifications only.

■ Installation

- Remove the sealing caps from the connections
- Ball valve must be mounted in open state only
- Ball valve must be fitted stress-free
- Only use suitable tools for fitting, e.g. a torque spanner
- Only use suitable screws and suitable and approved seals and sealing materials for all connections
- If an arrow is shown on the ball valve it must be installed in this flow direction
- Installation of possible attachment parts only by professionals according to the operation manuals, declarations of conformity and safety instructions of the manufacturers of those parts (actuators, limit switches, etc.)
- Tighten screws for flange connections gradually, evenly and crosswise

■ Start-up

- Ball valve and connections must be absolutely tight and may show no shortages or damages. Under this condition only, and only if it is unambiguously guaranteed that no danger of people or things exists the ball valve may be put into operation
- Start-up of possible attachment parts only by professionals according to the operation manuals, declarations of conformity and safety instructions of the manufacturers of those parts (actuators, limit switches, etc.)
- Operation of the armature only in fully opened or closed position
- Pressure loss in fully open state like conduit