2-WAY BALL VALVE WITH MOUNTING FLANGE FOR AUTOMATION

Description:
- 2-way ball valve
- 2-pieces body construction
- heavy-weight design
- full passageway
- female thread acc. to EN 10226
- blow out safe, spindle mounted from inside
- top flange acc. to EN ISO 5211
- any installation position
- maintenance-free by self-adjusting triple sealing for the spindle

Range of application:
- heavy-weight design for applications in rugged environment
- with mounting flange acc. to DIN ISO 5211 for direct mounting
- working pressure PN25 up to PN40 (see pressure temperature diagram)
- temperature range: -20°C up to +150°C (see pressure temperature diagram)
- hot and cold water, compressed air, oils, not corrosive liquids, hydrocarbon

Comments:
The ball valves can be directly automated.

Better protection against unintended disengagement of the spindle and the sealing by a blow out protection. No accidental damage possible from outside. The ball valve is designed with a triple sealing for the spindle: in the upper part with a seal made of PTFE and an o-ring made of HNBR, at the bottom with an anti-friction ring made of PTFE.

Threads according to EN 10226: It describes the threaded connection of a conical male thread (R) with a parallel female thread (Rp).

pos. | part                        | standard material          | optional material |
-----|------------------------------|----------------------------|-------------------|
1    | body                        | CW617N nickel plated       | E                 |
2    | connector                   | CW617N nickel plated       | -                 |
3    | ball                        | CW614N chromium-plated     | F                 |
4    | seat sealing                | PTFE                       | T                 |
5    | spindle                     | CW614N                     | -                 |
6    | sealing for spindle         | PTFE                       | -                 |
7    | o-ring                      | HNBR                       | T                 |
8    | sealing                     | PTFE                       | -                 |
9    | gland                       | CW614N                     | -                 |

For details about the order code see "Order information". An overview of the complete material code you can find at the beginning of each product section of the product catalogue.

options:
- SV: spindle extension
- EB: relief well
- SF: free of silicone
- OF: free of oil and grease

For electric actuated valves only:
- AP: accumulator security pack
- PT: potentiometer
- PO: positioning system

For pneumatic actuated valves only:
- SD: sound absorber
- AD: exhaust air regulator
- PV: pilot valve

For details see data sheet "GMV3197", "GMV3163" (3/2 way) and "MVA01" (5/2 way). Other types on request.
- PS: positioning indicator

For details see data sheet "MCM2" (mechanical), "MCN2" (inductive, with ATEX 94/9/EC) and "MCS2" (inductive). Other types on request.
**Type:** NKA07

<table>
<thead>
<tr>
<th>match code</th>
<th>size [inch]</th>
<th>nominal pressure [mm]</th>
<th>nominal size [mm]</th>
<th>L [mm]</th>
<th>H [mm]</th>
<th>thread depth [mm]</th>
<th>F</th>
<th>SW* [mm]</th>
<th>S [mm]</th>
<th>CV** [m³/h]</th>
<th>breakaway torque*** [Nm]</th>
<th>weight [kg]</th>
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</table>

* Spindle as square (standard).

**CV value:** The nominal flow rate CVs acc. to VDI/VDE 2173 shows the water quantity in cubic meter per hour with the valve fully opened, ∆p=1 and the water temperature between 5°C and 30°C.

***Breakaway torque:** all data is determined with water at max ∆p and normal ambient temperature. Multiplier for frictional media is 1.3. If your configuration has special sealing material or your application has critical media consultation is obligatory.

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**Pressure temperature diagram**

The pressure temperature diagram refers to the ball valve of this type. For the actuated units the actuator limits the permissible pressure range to the operating pressure as indicated above, as long as this is lower than the pressure range of the ball valve. If your application has strong temperature variations, you may need additional options like a relief well, to meet the figures. Please tell us your temperature variations with your order.

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**Order information:**

1: automation:
- no specification: free spindle
- D: pneumatic double acting
- S: pneumatic single acting
- E: electric actuated

2: type: NKA07

3: connection size: 02-10 (see table)

4: materials:
- 1. digit: body material (brass nickel plated)
- 2. digit: sealing for spindle (PTFE)
- 3. digit: ball material (brass chromium-plated)
- 4. digit: seat sealing (PTFE)

5: actuator:
- no specification: free spindle
- automated: see column "actuator"

6: options (see "options")

Please ask for field specifications that are not listed in this data sheet.

Before installation please consider the installation and maintenance manual, especially the safety indications!
NKA07 / SNKA07

High quality pneumatic actuator made of alloy with air connection according to NAMUR and positioning indicator. The actuator works with the rack/bevel method. For further details see the technical data sheet "DR/SC".

Types double acting (the actuator opens and closes with compressed air) and single acting (the actuator opens with compressed air and closes with spring pressure).

The actuators are configured for use with fluid, gas and antifriction medium. For critical media it is strictly recommended to inform us!

Description:
- working pressure: 0 - 16 bar
- medium temperature: -20°C up to +100°C (at max. ambient temperature 40°C)
- pilot pressure: 6 - 8 bar
- medium temperature: -20°C up to +100°C

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ENKA07

High-quality electric actuator in compact design with a body made of high-strength plastics. It has a high-performance motor and a gear drive made of metal. A central control room heater and an electronic torque limiter are equipped as standard. For further details see the technical data sheet "J".

Description:
- working pressure: 0 - 16 bar
- medium temperature: -20°C up to +70°C (at max. ambient temperature 40°C)
- pilot pressure: 6 - 8 bar
- medium temperature: -20°C up to +100°C
- connection voltage type:
  - 19: 24V AC/DC up to 240V AC/DC
  - other voltages on request

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