2-WAY BALL VALVE WITH MOUNTING FLANGE FOR AUTOMATION

Type: NKA27

Description:
- 2-pieces body construction
- light-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

Range of application:
- light-weight design for a variety of industrial applications
- with mounting flange acc. to DIN ISO 5211 for direct mounting
- very low torque allow an economical actuator design
- working pressure PN40 up to PN16 (see pressure temperature diagram)
- temperature range: -20°C up to +130°C (see pressure temperature diagram)
- hot and cold water, compressed air, oils, not corrosive liquids, hydrocarbon

Comments:
Better protection against unintended disengagement of the spindle and the sealing by a blow out protection. No accidental damage from outside possible.

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

More threaded connections are available on request:
- parallel thread "G" acc. to ISO 228
- threads acc. to NPT or BSPT

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    | anti-friction ring | PTFE                       | -                 |
7    | o-ring     | HNBR                               | H                 |

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.
### 2-WAY BALL VALVE WITH MOUNTING FLANGE FOR AUTOMATION

**Type:** NKA27

<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>F</th>
<th>Thread Depth [mm]</th>
<th>SW* [mm]</th>
<th>S [mm]</th>
<th>CV Value** [m³/h]</th>
<th>Breakaway Torque*** [Nm]</th>
<th>Weight [kg]</th>
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<tr>
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*Spindle as square (standard).

**CV value:** The nominal flow rate CVs acc. to VDI/VE 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. Multiplicator for frictional media is 1.3. If your configuration has special sealing material or your application has critical media consultation is obligatory.

### 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.

### Order Information:

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

2. **type:** NKA27

3. **connection size:** 02-11 (see table)

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

5. **actuator:**
   - free spindle: no specification
   - 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!
**Type:** NKA27

**2-WAY BALL VALVE WITH MOUNTING FLANGE FOR AUTOMATION**

NKA27 / SNKA27

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

### DNKA27 / SNKA27

<table>
<thead>
<tr>
<th>match code</th>
<th>actuator</th>
<th>H [mm]</th>
<th>B [mm]</th>
<th>D [mm]</th>
<th>weight [kg]</th>
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</table>

### ENKA27

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 +100°C (at max. ambient temperature 40°C)

<table>
<thead>
<tr>
<th>match code</th>
<th>actuator</th>
<th>H [mm]</th>
<th>B [mm]</th>
<th>D [mm]</th>
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**connection voltage type:**
- 19: 24V AC/DC up to 240V AC/ DC
- other voltages on request

Attention! To avoid corrosion inside the spring chamber for single acting actuators caused by aggressive ambient air we recommend pilot valves with integrated air recirculation.