

# Angle valve 7050



## DN 15 to DN 50

### Pneumatically operated angle valves for controlling neutral, light and highly aggressive fluids.

- Compact design
- Insensitive to slightly soiled media
- Temperature versions from -100°C to +220°C
- Operating pressures up to 40 bar
- Rotatable drives
- high Kvs values

#### Technical specifications

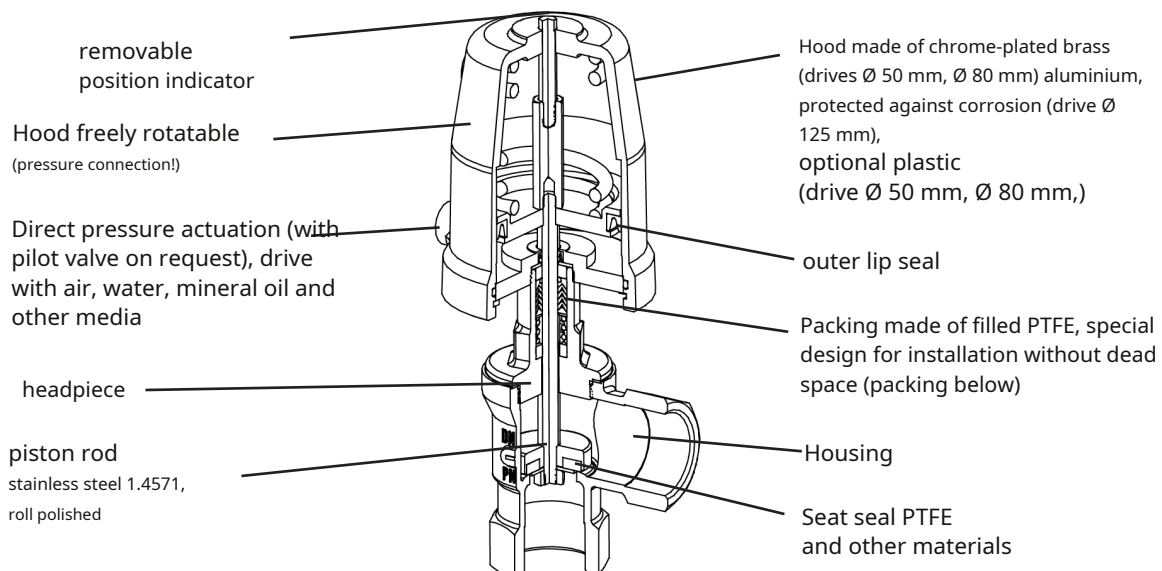
|                                    |  |
|------------------------------------|--|
| nominal widths                     | DN 15 to DN 50   |
| housing material                   | 1.4408   |
| Connection:                        |  |
| Pipe thread according to ISO 228-1 | 1/2" - 2"  |
| NPT thread                         | 1/2" - 2"  |
| nominal pressure                   | PN 40  |
| Media temperature*:                |  |
| with metal hood                    | - 30°C to +170°C, opt. -100°C to 220°C   |
| with plastic hood                  | - 30°C to +135°C   |
| with diaphragm drive               | - 30°C to +200°C, opt. -30°C to 220°C  |
| ambient temperature*               | - 30°C to +60°C  |
| viscosity of the medium            | maximum 600 mm <sup>2</sup> /s (600cSt, 80°E)  |
| vacuum                             | maximum 0.001 bar abs  |
| operating pressures                | See tables and diagrams, limit for dangerous gases according to Pressure Equipment Directive 2014/68/EU (category I): PS x DN < 1000 |
| operating pressure at              | maximum 12 bar   |
| dead space-free design             |  |
| Leakage according to EN 12266-1    | Leakage class A  |
| leakage pack                       | Tested according to TA-Luft<br>DIN EN ISO 15848-1 and VDI 2440   |

\* : Please note further temperature versions and temperature limits in information sheet 32



#### options

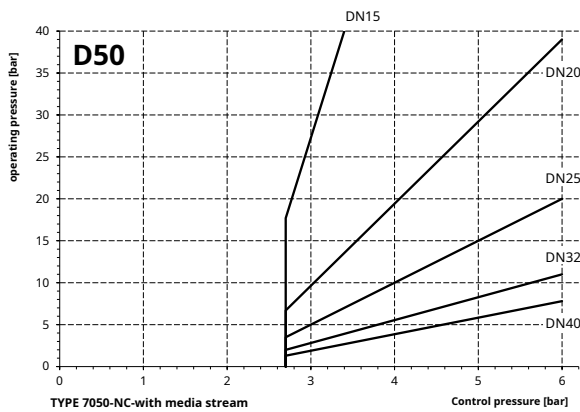
- Limit switch
  - inductive proximity switches
  - electrical contact switches
  - pneumatic switches
- pilot valves
- Manual override
- Oil and grease-free design



## Spring closes (closing with media flow)

Angle valves closing with media flow, spring closes. Use preferably with gaseous media, closing impacts are possible with liquids.  
A 0.9 bar higher control pressure is required for the HT version with drive  $\varnothing$  50 mm.

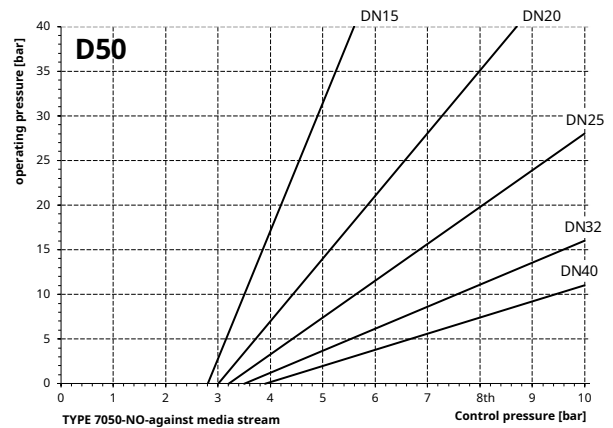
### Piston drive 50 mm



## Spring opens (closing against media flow)

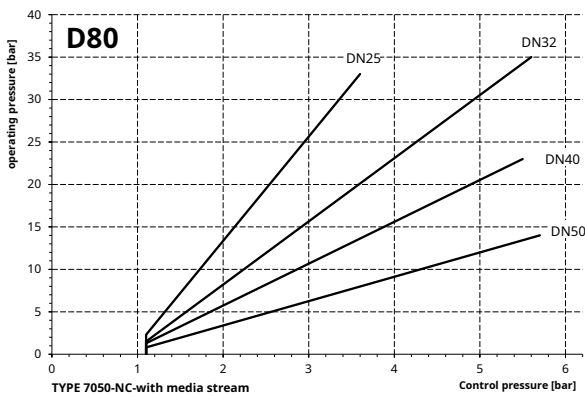
Angle valves, closing against the media flow, spring opens.

### Piston drive 50 mm

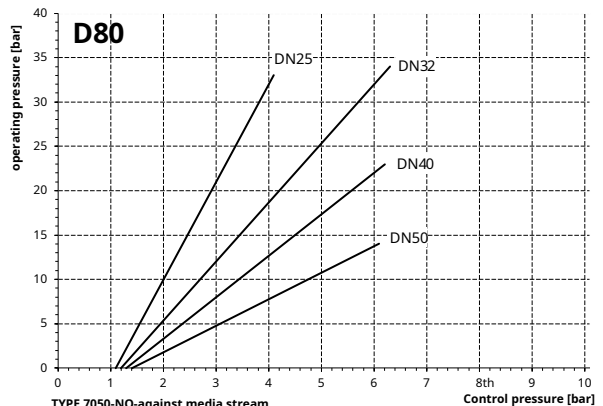


maximum control pressure 1 bar above required control pressure for operating pressure

### Piston drive 80 mm

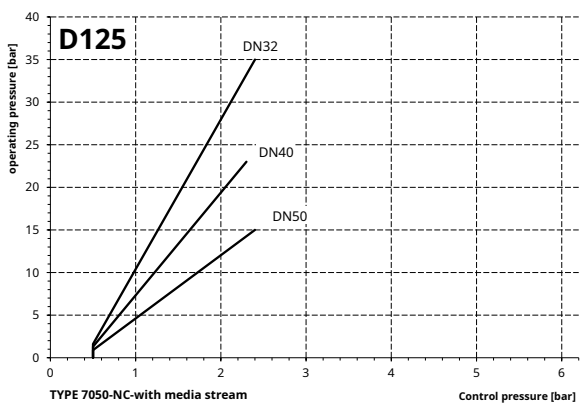


### Piston drive 80 mm

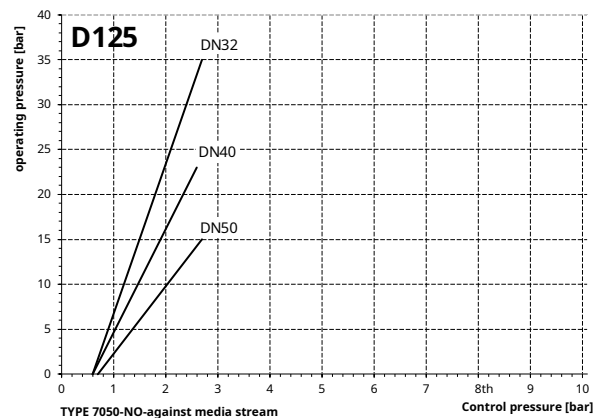


maximum control pressure 0.8 bar above required control pressure for operating print

### Piston drive 125 mm



### Piston drive 125 mm



maximum control pressure 0.5 bar above required control pressure for operating print

## Spring closes (closing against the media flow)

| nominal size DN | max. working pressure (differential pressure) [bar] | control pressure [bar] | drive through-knife | Number the feathers |
|-----------------|---|------------------------|---------------------|---------------------|
| DN15            | 15  | 3.5 - 10               | 50mm                | 1                   |
| DN15            | 27  | 4.5 - 10               | 50mm                | 2                   |
| DN20            | 5.1   | 3.5 - 10               | 50mm                | 1                   |
| DN20            | 10  | 4.5 - 10               | 50mm                | 2                   |
| DN20            | 16  | 5.7 - 10               | 50mm                | 3                   |
| DN25            | 2.3   | 3.5 - 10               | 50mm                | 1                   |
| DN25            | 5.6   | 4.5 - 10               | 50mm                | 2                   |
| DN25            | 8.9   | 5.7 - 10               | 50mm                | 3                   |
| DN25            | 20  | 3.5 - 10               | 80mm                | 1                   |
| DN32            | 3.1   | 4.5 - 10               | 50mm                | 2                   |
| DN32            | 5.1   | 5.7 - 10               | 50mm                | 3                   |
| DN32            | 11  | 3.5 - 10               | 80mm                | 1                   |
| DN32            | 16  | 4.4 - 10               | 80mm                | 2                   |
| DN32            | 21  | 5.6 - 10               | 80mm                | 3                   |
| DN32            | 10  | 1.3 - 10               | 125mm               | 1                   |

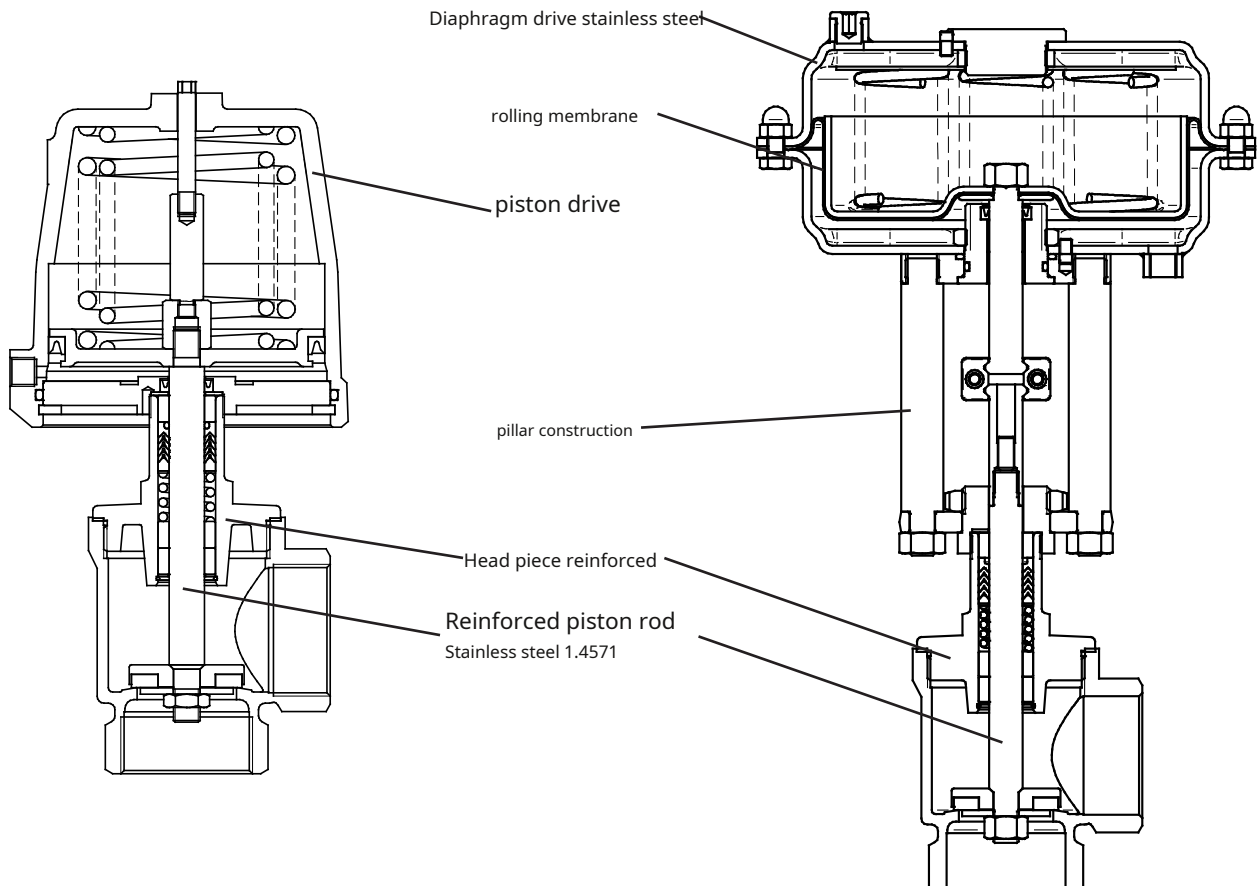
| nominal size DN | max. working pressure (differential pressure) [bar] | control pressure [bar] | drive through-knife | Number the feathers |
|-----------------|---|------------------------|---------------------|---------------------|
| DN32            | 22  | 2.2 - 10               | 125mm               | 2                   |
| DN40            | 1.9   | 4.5 - 10               | 50mm                | 2                   |
| DN40            | 3.4   | 5.7 - 10               | 50mm                | 3                   |
| DN40            | 6.8   | 3.5 - 10               | 80mm                | 1                   |
| DN40            | 9.6   | 4.4 - 10               | 80mm                | 2                   |
| DN40            | 12  | 5.6 - 10               | 80mm                | 3                   |
| DN40            | 6.3   | 1.3 - 10               | 125mm               | 1                   |
| DN40            | 14  | 2.2 - 10               | 125mm               | 2                   |
| DN40            | 20  | 3:1-10                 | 125mm               | 3                   |
| DN50            | 4   | 3.5 - 10               | 80mm                | 1                   |
| DN50            | 5.9   | 4.4 - 10               | 80mm                | 2                   |
| DN50            | 7.7   | 5.6 - 10               | 80mm                | 3                   |
| DN50            | 8.7   | 2.2 - 10               | 125mm               | 2                   |
| DN50            | 12  | 3:1-10                 | 125mm               | 3                   |

= standard (2 springs)

## Angle valve type 7050 reinforced version

Stainless steel DN40 and DN50

PN40



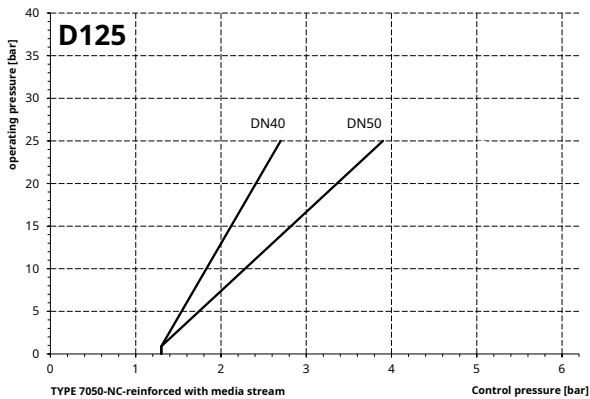
## Spring closes (closing with media flow)

Flange valves closing with media flow, spring closes. Use preferably with gaseous media, closing impacts are possible with liquids.

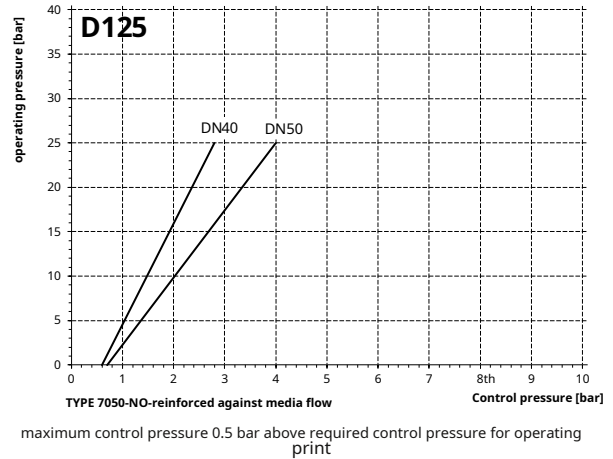
## Spring opens (closing against media flow)

Flanged valves, closing against the media flow, spring opens.

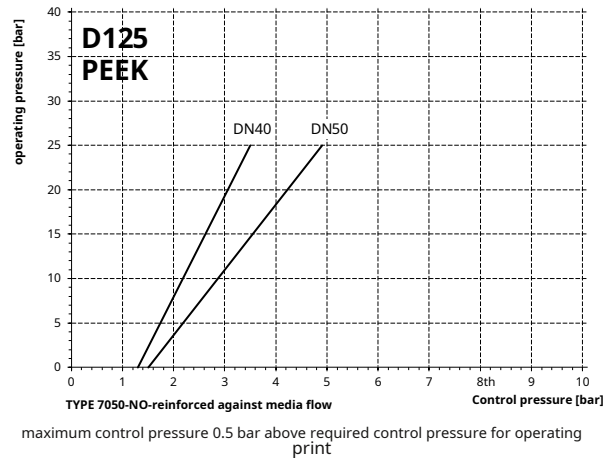
### Piston drive D125 mm - a powerful spring



### Piston drive D125 mm



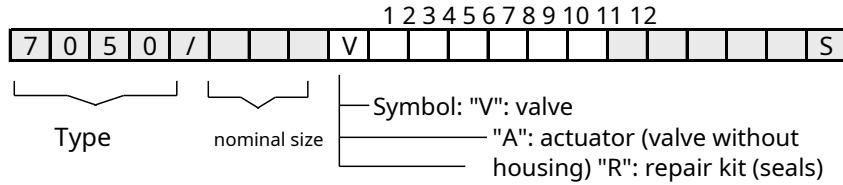
### Piston actuator D125 mm - PEEK seat seal



## Spring closes (closing against the media flow)

| nominal size | max. working pressure (differential pressure) bar | Tax-print bar | drive diameter D mm | feathers |
|--------------|---|---------------|---------------------|----------|
| DN40         | 20  | 3:1-10        | 125                 | 3        |
| DN40         | 25  | 2.8 - 6       | 250                 | 8th      |
| DN50         | 12  | 3:1-10        | 125                 | 3        |
| DN50         | 15  | 2.2 - 6       | 250                 | 6        |
| DN50         | 19  | 2.8 - 6       | 250                 | 8th      |
| DN50         | 24  | 3.7 - 6       | 250                 | 12       |
|              |   |               |                     | default  |

**Order number system**



1 - 6 : Please enter all 6 digits  
 7 - 12: Only enter if necessary

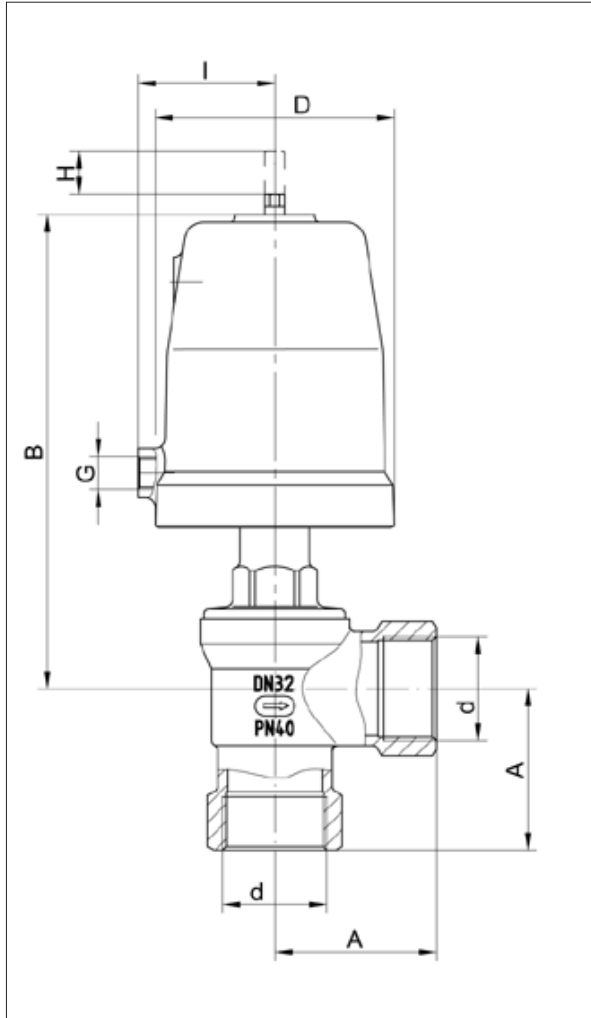
| 1. Design  | 2. Connection                           | 3. casework<br><small>material</small>                 | 4. Seat seal  | 5. Control function   | 6. Drive   |
|--|---|--|---|---|--|
| 7 angle valve  | 0 pipe thread ISO 228-1<br>5 NPT thread | 2 Stainless steel PN40                                 | 0 PTFE<br>1 FKM<br>2 EPDM<br>3 NBR  | 0 Spring closes (closing with the media flow)<br>1 Spring opens (closing against the media flow)<br>2 Spring closes (closing against the media flow) double-acting<br>3   | 0 Piston Ø50mm<br>1 Piston Ø80mm<br>2 Piston Ø125mm diaphragm drive D250mm<br>C Piston Ø50mm with plastic hood<br>K Piston Ø80mm with plastic hood<br>M Piston Ø80mm with plastic hood |
| 7. Feathers  | 8. Headstock material                   | 9th pack   | 10. temperature guides  | 11. Accessories   | 12. Other special remarks  |
| - Default-assembly<br>1 1 feather<br>2 2 springs<br>3 3 springs<br>T 6 springs (D250)<br>W 8 springs (D250)<br>Y 12 springs (D250) | - default                               | - default<br>2 free of dead space (package lies below) | - default<br>H high temperature execution until + 200°C<br>V outer lip seal Viton | - without accessories<br>1 1 limit signal transmitter (micro switch)<br>2 2 limit signal transmitters (micro switch)<br>3 manual override<br>4 manual override<br>5 stroke limitation<br>6 Pilot valve DN 2, 230 V AC<br>7 Pilot valve DN 2, 24 V DC 1<br>K limit signal transmitter compact (micro switch)<br>M 2 limit switches inductive 10-36 V DC PNP 1<br>P limit signal transmitter inductive 10-36 V DC PNP 1<br>T limit signal transmitter compact inductive 10-30V DC PNP | S special designs<br>N el. position indicator with plug connection<br>M el. position indicator with cable guide  |

Order example: 7050/050V7020212 - - - 5  
 Angle valve type 7050, DN 50, Whitworth pipe thread connection, body material stainless steel, seat seal PTFE, spring closes, closing against media flow, drive 80 mm, two springs, stroke limitation.

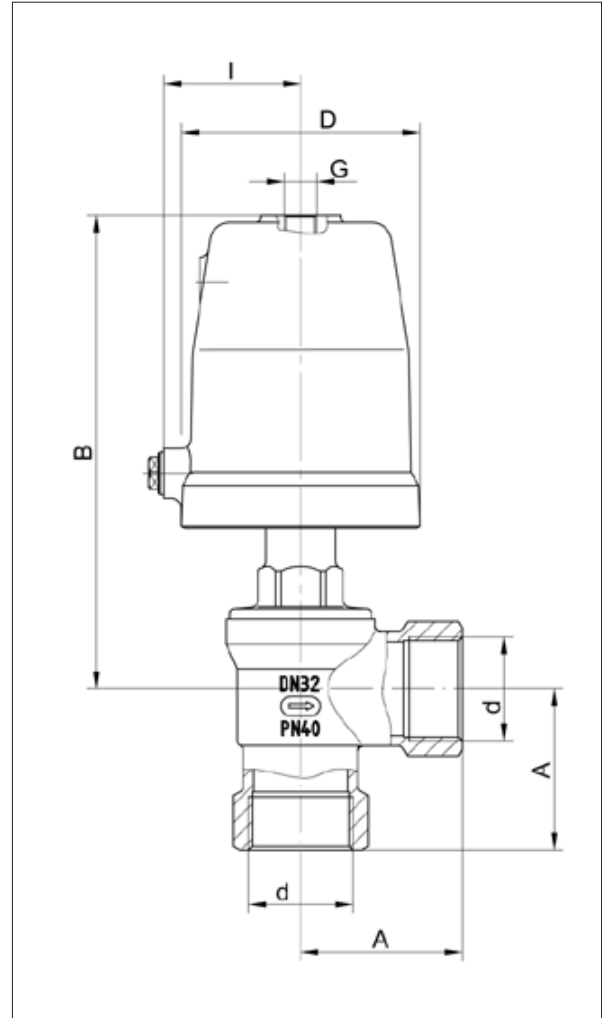
**Reinforced version (from DN40):**

Order example: 7050/050V7020223 - - - 5S-K  
 Angle valve type 7050, DN 50, Whitworth pipe thread connection, body material stainless steel, seat seal PTFE, spring closes, closing against media flow, actuator 125 mm, three springs, stroke limitation, reinforced version  
 "K" Reinforced version

mass and weight



spring closes

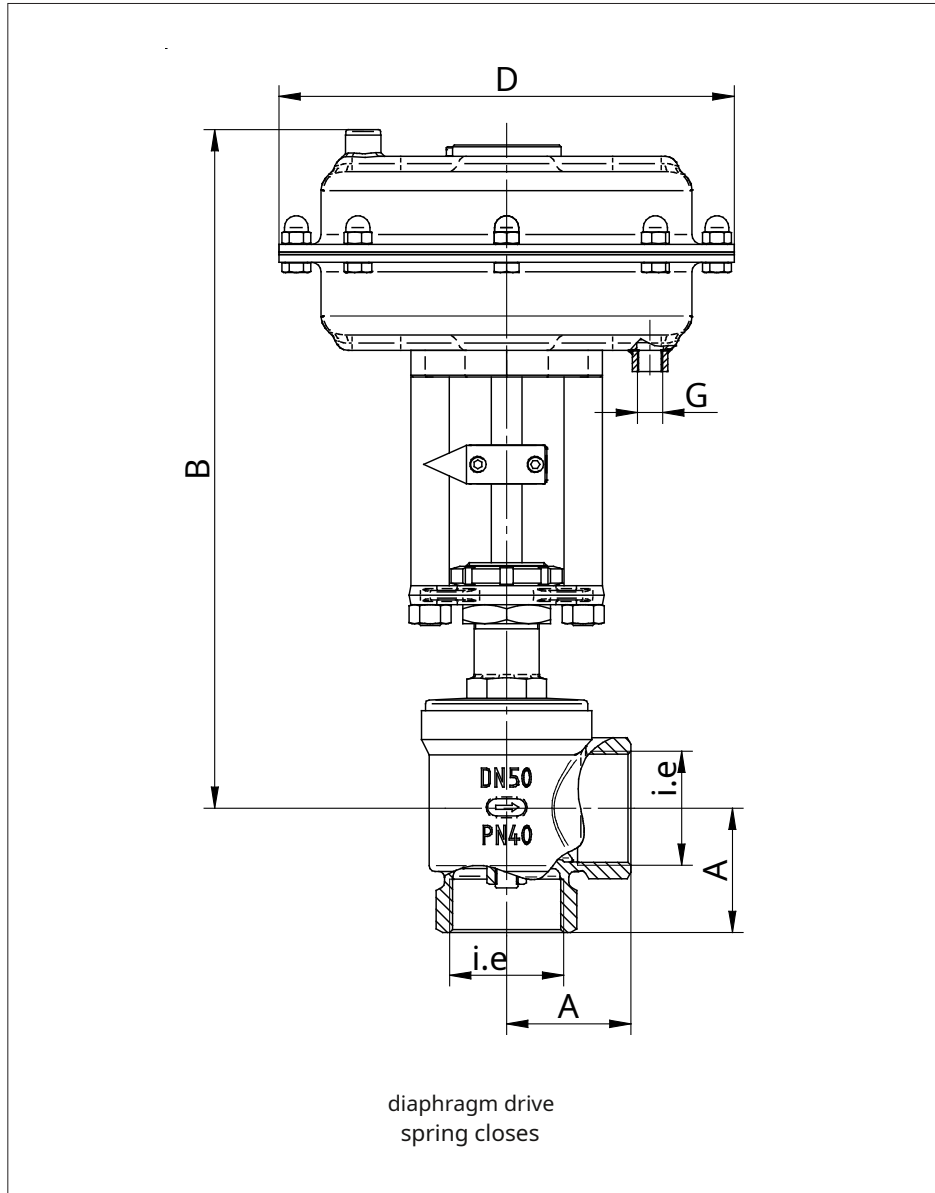


spring opens

| DN | drive | A  | B     | D   | i.e    | G    | hub  | I    | Kvs value |
|----|-------|----|-------|-----|--------|------|------|------|-----------|
| 15 | 50    | 41 | 139   | 62  | 1/2"   | 1/8" | 12   | 34.5 | 5.1       |
| 20 | 50    | 41 | 140   | 62  | 3/4"   | 1/8" | 15.5 | 34.5 | 11.5      |
| 25 | 50    | 41 | 140.5 | 62  | 1"     | 1/8" | 15.5 | 34.5 | 20        |
| 25 | 80    | 41 | 179.5 | 98  | 1"     | 1/4" | 20   | 55   | 20        |
| 32 | 50    | 65 | 153.5 | 62  | 1 1/4" | 1/8" | 15.5 | 34.5 | 25        |
| 32 | 80    | 65 | 192.5 | 98  | 1 1/4" | 1/4" | 23   | 55   | 30        |
| 32 | 125   | 65 | 216.5 | 144 | 1 1/4" | 1/4" | 23   | 55   | 30        |
| 40 | 50    | 65 | 160.5 | 62  | 1 1/2" | 1/8" | 15.5 | 34.5 | 40        |
| 40 | 80    | 65 | 199.5 | 98  | 1 1/2" | 1/4" | 28.5 | 55   | 45        |
| 40 | 125   | 65 | 223.5 | 144 | 1 1/2" | 1/4" | 28.5 | 55   | 45        |
| 50 | 80    | 65 | 216   | 98  | 2"     | 1/4" | 30   | 55   | 65        |
| 50 | 125   | 65 | 240   | 144 | 2"     | 1/4" | 30   | 55   | 65        |

size in mm

## mass and weight



| DN | drive | A  | B   | D   | i.e    | G     | hub | Kvs value | Weight [kg] |
|----|-------|----|-----|-----|--------|-------|-----|-----------|-------------|
| 40 | 250   | 65 | 347 | 238 | 1 1/2" | G1/4" | 24  | 42        | 12.5        |
| 50 | 250   | 65 | 355 | 238 | 2"     | G1/4" | 24  | 49        | 13.5        |

size in mm