

## “ADCATROL” CONTROL VALVES V25 (EN)

(V25 globe control valves suitable for linear actuators PA and EL series)

### DESCRIPTION

The V25 control valves are single seated, two-way body constructed with in-line straight connections. The valves can be supplied with PA pneumatic actuator-rubber diaphragm and multi-springs DA-direct action (air to close) or RA-reverse action (air to open) or they can also be supplied with EL electric actuators. The V25 valves have been designed to assure an accurate control in any process condition. Their wide application ranges allows the use of this valve with the most common process fluids such as water, superheated water, steam, air, gas and other non corrosive fluids.

### MAIN FEATURES

Single seated, two ways, direct or reverse action valve.  
Valve top flange permanently attached to the body, removal is unnecessary for replacing the actuator.  
Metal to metal or soft sealing.



|   |   |
|---|---|
| <p><b>OPTIONS:</b></p> <ul style="list-style-type: none"> <li>Perforated low noise plug</li> <li>Bellows sealed</li> <li>Stainless steel construction.</li> </ul> <p><b>USE:</b></p> <ul style="list-style-type: none"> <li>Saturated and superheated steam.</li> <li>Hot and superheated water.</li> <li>Air, gases and other noncorrosive fluids.</li> </ul> <p><b>AVAILABLE MODELS:</b></p> <p>V25G and V25S</p> <p><b>VALVE SIZES:</b></p> <p>DN125 to DN150</p> <p><b>CONNECTIONS:</b></p> <p>Flanged EN1092-1/-2 PN16 - PN40</p> <p><b>ACTUATORS:</b></p> <p>PA or EL series</p> <p><b>HOW TO SELECT:</b> Never size the valve according to the pipe diameter in which it has to be fitted but according to the required actual flow of steam or water. Refer to valve calculation data sheet or consult the factory.</p> | <p><b>BONNET :</b></p> <p>From -5°C to +220°C (standard)<br/>Finned for temperature &gt;220°C</p> <p><b>STEM SEALING:</b></p> <p>PTFE/GR V-Rings - up to 220°C (Standard bonnet)<br/>Graphite - up to 400°C (Finned bonnet)<br/>Stainless steel bellows</p> <p><b>PLUG CHARACTERISTICS:</b></p> <p>EQP - Equal percentage<br/>PL - Linear<br/>PT - On-Off</p> <p><b>PLUG DESIGN :</b></p> <p>Contoured (on request)<br/>V-ported<br/>Perforated<br/>(Low noise, anti-cavitation)</p> <p><b>PORT:</b></p> <p>Full port or reduced on request</p> |
|---|---|

| CE MARKING (PED - European Directive 97/23/EC) |       |                |               |
|--|-------|----------------|---------------|
| PN 16  | PN 25 | PN 40          | Category      |
| DN125 to DN150                                 | DN125 | /              | 1 (CE Marked) |
| /  | DN150 | DN125 to DN150 | 2 (CE Marked) |

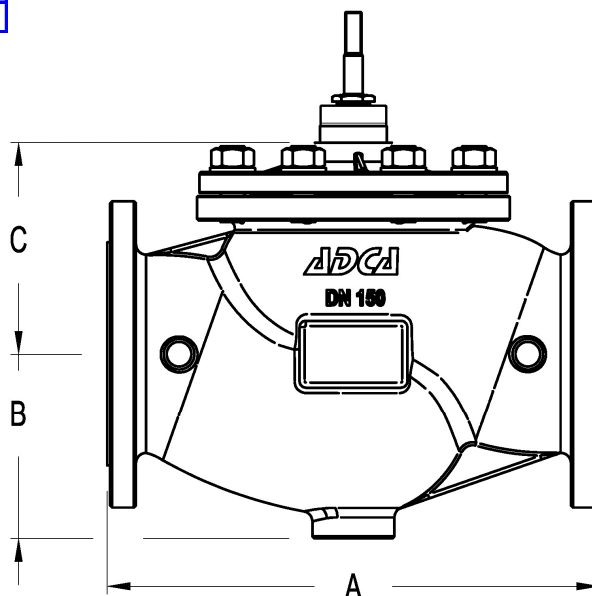
**VALVE BODY LIMITING CONDITIONS**

| V25G - PN16 *       |               | V25S - PN40 *       |               |
|---------------------|---------------|---------------------|---------------|
| ALLOWABLE PRESSURES | RELATED TEMP. | ALLOWABLE PRESSURES | RELATED TEMP. |
| 16 bar              | -10/50 °C     | 40 bar              | -10 /50° C    |
| 13,3 bar            | 200 °C        | 33,3 bar            | 200 °C        |
| 12,1 bar            | 250 °C        | 27,6 bar            | 300 °C        |
| 11 bar              | 300 °C        | 25,7 bar            | 350 °C        |
| 10,2                | 350 °C        | 23,8 bar            | 400 °C        |

Note: Maximum temperature limited to the valve packing selected.

Valves with soft seat , maximum allowable temperature : 200°C

\*Rating according to EN 1092-1:2007


**DIMENSIONS - STROKE - FLOW RATE COEFICIENTS**

| DN  | A (mm) | B (mm) | C (mm)   |          | STROKE (mm) | Kvs (m3/h)         |               |                |
|-----|--------|--------|----------|----------|-------------|--------------------|---------------|----------------|
|     |        |        | BONNET   |          |             | V-Ported EQP & PL* | Perforated PL | Perforated EQP |
|     |        |        | STANDARD | EXTENDED |             |                    |               |                |
| 125 | 400    | 135    | 183      | 580      | 40          | 230,6              | 180           | 121            |
| 150 | 480    | 150    | 200      | 595      | 40/50       | 316,1              | 260           | 189            |

\*PL characteristic can be used also for on-off (PT) control.

Perforated plugs and on-off valves may have different strokes, please see IS PV10.00 E or consult factory.

Kvs in m3/h , see data sheet IS PV10.00 E ; For conversion Kvs = Cv(US) x 0,855

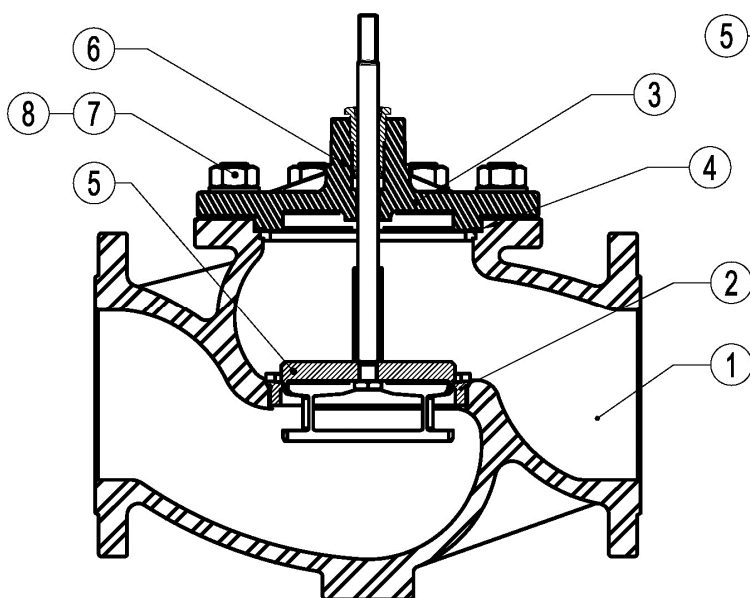
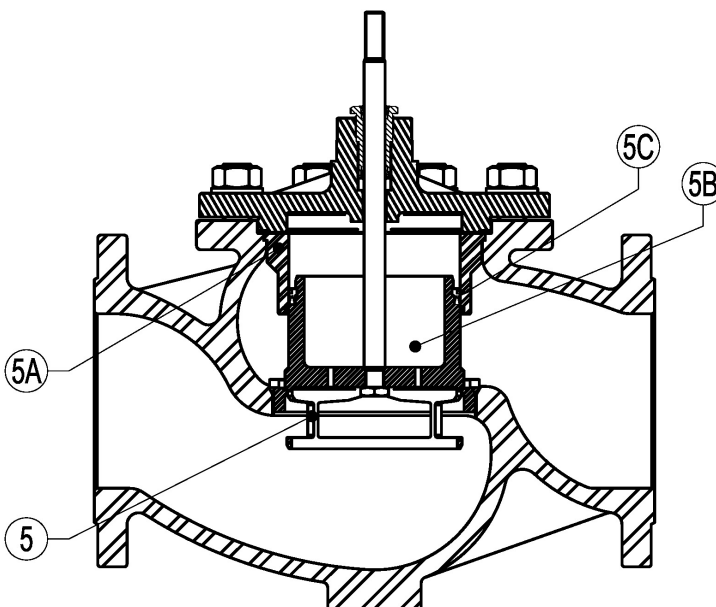
**PLUG DESIGN**

| V - Ported Equal percentage - EQP | V - Ported Linear - PL | Perforated Equal percentage - EQP | Perforated Linear - PL |
|-----------------------------------|------------------------|-----------------------------------|------------------------|
|                                   |                        |                                   |                        |

V-Ported and perforated plugs are also available in balanced pressure version.

| MATERIALS |                   |   |
|-----------|-------------------|---|
| POS.      | DESIGNATION       | MATERIAL V25G - V25S                        |
| 1         | Valve Body        | ASTM A216WCB / 1.0619 ;<br>GP240GH / 1.0619 |
| 2         | *Seat             | Stainless steel                             |
| 3         | Bonnet            | ASTM A216WCB / 1.0619 ;<br>GP240GH / 1.0619 |
| 4         | *Gasket           | Stainless steel / Graphite                  |
| 5         | *Valve plug       | Stainless steel                             |
| 5A        | *Valve sleeve     | Stainless steel                             |
| 5B        | Balance piston    | Stainless steel                             |
| 5C        | Sealing rings     | St.St./Graphite                             |
| 6         | *Standard packing | Graphite                                    |
| 7,8       | Bolts and Nuts    | Steel                                       |

\* Available spare parts


**VALVE DESIGN - FLOW DIRECTION**

| STANDARD<br>V - PORTED PLUG | STANDARD<br>PERFORATED PLUG | BALANCED<br>V - PORTED PLUG | BALANCED<br>PERFORATED PLUG |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
|                             |                             |                             |                             |