





"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 allow 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.

OPTIONS: Perforated low noise plug.

Bellows seal (DN 125 and 150 only).

Stainless steel construction.

USE: Saturated and superheated steam.

Hot and superheated water.

Air, gases and other noncorrosive

fluids.

Group 1 fluids (consult factory).

AVAILABLE

MODELS: V25G and V25S.

VALVE SIZES: DN 125 to DN 200.

CONNECTIONS: Flanged EN1092-1/-2 PN16 – PN40.

ACTUATORS: PA or EL series.

BONNET: From -5 °C to +220 °C (standard)

Finned for temperature >220 °C

STEM SEALING: PTFE/GR V-Rings - up to 220 °C

(Standard bonnet).

Graphite – up to 400 °C (Finned bonnet)

Stainless steel bellows.

ADCA:

PLUG CHARACT.: EQP – Equal percentage.

PL – Linear. PT – On/Off.

PLUG DESIGN: Contoured.

V-ported.

Perforated (Low noise, anti

caviation).

PORT: Full port or reduced on

request.

COMPLEMENTARY

INFORMATION: See

See IS PV10.00 E – Technical information.

| CE MARKING – GROUP 2 (PED – European Directive) | | | |
|---|------------------|---------------|--|
| PN16 PN40 | | Category | |
| DN 125 to DN 200 | _ | 1 (CE Marked) | |
| _ | DN 125 to DN 200 | 2 (CE Marked) | |

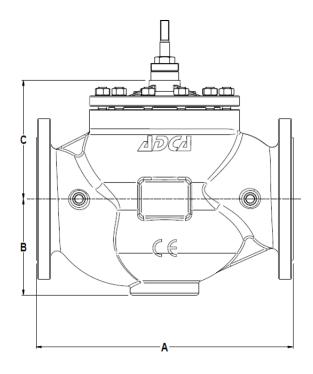
HOW TO SELECT: Never size the valve according to the pipe diameter in which it has to be fitted, but according to the required actual flow of steam or water. Refer to valve calculation data sheet or consult the factory.





| BODY LIMITING CONDITIONS | | | | |
|--------------------------|------------------|---------------------|------------------|--|
| V25G – PN16 * | | V25S - PN40 * | | |
| ALLOWABLE PRESSURES | RELATED TEMP. | ALLOWABLE PRESSURES | RELATED TEMP. | |
| 16 bar | -10 °C / 50 °C | 40 bar | -10 °C / 50 °C | |
| 14,7 bar | 200 °C | 33,3 bar | 200 °C | |
| 13,9 bar | 250 °C | 27,6 bar | 300 °C | |
| 12,8 bar | 300 °C | 25,7 bar | 350 °C | |
| 11,2 bar | 350 °C | 23,8 bar | 400 °C | |

Note: Maximum temperature limited to the valve packing selected. Valves with soft seal, maximum allowable temperature: 200 °C. Rating according to EN1092-1:2018



DIMENSIONS / STROKES / FLOW RATE COEFFICIENTS C (mm) BONNET Kvs (m3/h) STROKE DN (mm) (mm) (mm) V-Ported Perforated Perforated STANDARD **FINNED BELLOWS** EQP & PL * **EQP** PL 230,6 180 125 400 135 183 303 590 40 121 480 150 150 200 320 610 40 / 50 316,1 260 189 225 398 50 / 80 590 402 270

Perforated plugs and on-off valves may have different strokes, please see IS PV10.00 E or consult factory. Kvs in m^3/h , see data sheet IS PV10.00 E; For conversion Kvs = $Cv(US) \times 0.855$.

| 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.

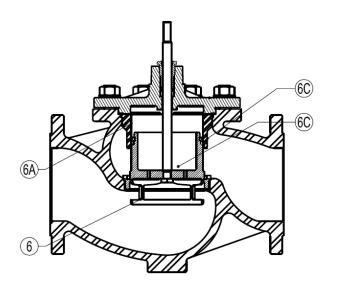
^{*} PL characteristic can be used also for on-off (PT) control.

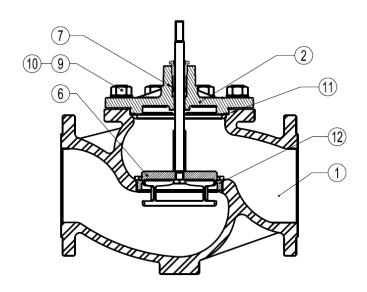




| MATERIALS | | | |
|-----------|-------------------|--|--|
| POS. | DESIGNATION | MATERIAL V25G | MATERIAL V25S |
| 1 | Valve body | GJS-400-15 / 0.7040 | ASTM A216WCB / 1.0619; GP240GH / 1.0619 |
| 2 | Bonnet | ASTM A216WCB / 1.0619; GP240GH / 1.0619 | ASTM A216WCB / 1.0619; GP240GH / 1.0619 |
| 6 | * Valve plug | AISI 316 / 1.4401 | AISI 316 / 1.4401 |
| 6A | * Valve sleeve | AISI 316 / 1.4401 | AISI 316 / 1.4401 |
| 6B | Balanced piston | AISI 316 / 1.4401 | AISI 316 / 1.4401 |
| 6C | Sealing rings | Stainless steel / Graphite | Stainless steel / Graphite |
| 7 | *Standard packing | Graphite | Graphite |
| 9 | Studs | 34CrNiMo6 / 1.6582 | 34CrNiMo6 / 1.6582 |
| 10 | Nuts | Steel 8.8 | Steel 8.8 |
| 11 | *Gasket | Stainless steel / Graphite | Stainless steel / Graphite |
| 12 | *Seat | AISI 316 / 1.4401 | AISI 316 / 1.4401 |

^{*} Available spare parts.





| VALVE DESIGN – FLOW DIRECTION | | | |
|-------------------------------|-----------------------------|---------------------------|-----------------------------|
| STANDARD V-PORTED PLUG | STANDARD PERFORATED PLUG | BALANCED V-PORTED PLUG | BALANCED PERFORATED PLUG |
| | | | |