



## INTERMITTENT BLOWDOWN VALVES VPA 26 (Fabricated steel)

### DESCRIPTION

The VPA26 blowdown valve was specially designed for application on steam boilers removing the concentrations of solids avoiding boiler damages, unstable water level control and other typical problems.

The valves are provided with a diaphragm actuator suitable for compressed air motive fluid.

The opening signal is supplied by an automatic intermittent control unit or manually (optional).

Connections are flanged or threaded on request.

### OPERATION

The valve can be operated manually or using a pneumatic actuator. Valve aperture depends from the boiler manufacturer specification (example: once a day during five seconds).

### MAIN FEATURES

High quality hardened valve and seat.

Manual or automatic control.

Can be locked in the open position if supplied with the manual operation lever.

|          |   |
|----------|---|
| OPTIONS: | Air filter regulator<br>Solenoid valve with cycling timer .<br>Mechanical limit switch<br>Water powered actuator<br>Stainless steel construction. |
| USE:     | Intermittent blowdown of steam boilers.   |

|                   |        |
|-------------------|--------|
| AVAILABLE MODELS: | VPA 26 |
|-------------------|--------|

|              |                                |
|--------------|--------------------------------|
| VALVE SIZES: | DN20 to DN50 ; DN 3/4" to DN2" |
|--------------|--------------------------------|

|              |                           |
|--------------|---------------------------|
| CONNECTIONS: | Flanged EN 1092-1 or ANSI |
|--------------|---------------------------|

|            |                 |
|------------|-----------------|
| ACTUATORS: | PA-205; PA-280. |
|------------|-----------------|

|                |            |
|----------------|------------|
| ACTUATOR CONN: | 1/4" NPT-F |
|----------------|------------|

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.



| VALVE BODY LIMITING CONDITIONS<br>VPA26 |                     |
|---|---------------------|
| ALLOWABLE PRESSURES                     | RELATED TEMPERATURE |
| 40 bar                                  | -10 / 50° C         |
| 33,3 bar                                | 200 °C              |
| 30,4 bar                                | 250 °C              |
| 27,6 bar                                | 300 °C              |

MAX. AIR/WATER SUPPLY PRESS.: 3,5 bar

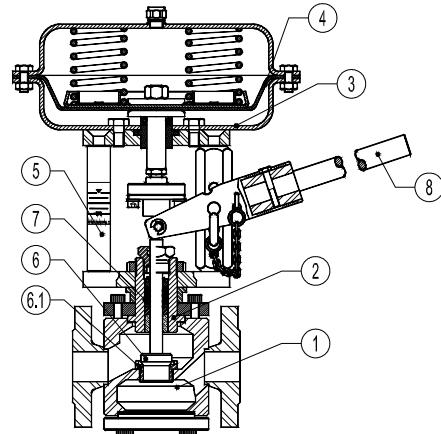
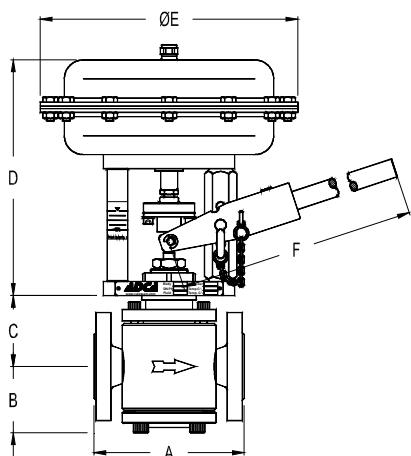
AMBIENT TEMPERATURE: -20°C ...+70°C

STEM SEALING: Graphite - up to 300°C

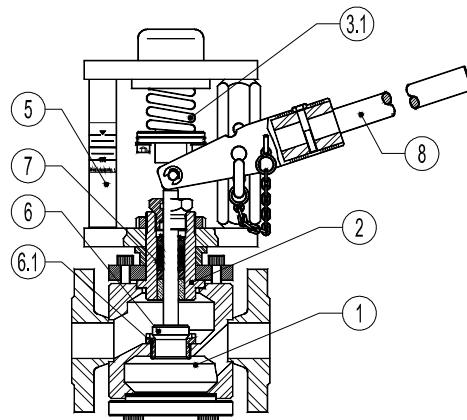
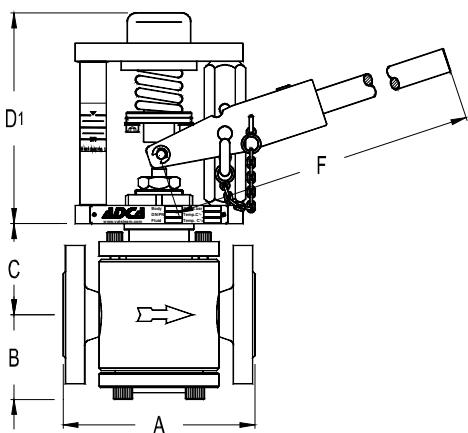
PLUG CHARACTERISTIC: PT - On-off

PORT: Full port or reduced on request

| CE MARKING (PED - European Directive 97/23/EC) |                          |
|--|--------------------------|
| PN 40  | Category                 |
| DN20 to DN32                                   | SEP - art. 3, paragraph3 |
| DN40 to DN50                                   | 1 (CE Marked)            |



VPA26 – with pneumatic actuator and manual operation



VPA26 – manual operation only

| DIMENSIONS ( mm ) - VALVE BODY EN FLANGES |           |           |    |     |     |     |               |              |
|---|-----------|-----------|----|-----|-----|-----|---------------|--------------|
| DN  | A<br>PN40 | A<br>PN63 | B  | C   | D1  | F   | * WGT.<br>Kgs | **WGT<br>Kgs |
| 20  | 150       | /         | 71 | 75  | 175 | 490 | 22            | 19           |
| 25  | 160       | 190       | 71 | 75  | 175 | 490 | 22            | 19           |
| 32  | 180       | /         | 75 | 83  | 175 | 490 | 26            | 23           |
| 40  | 200       | 220       | 82 | 97  | 175 | 640 | 30            | 28           |
| 50  | 230       | 250       | 97 | 100 | 175 | 640 | 40            | 38           |

| MATERIALS |              |                          |
|-----------|--------------|--------------------------|
| POS.      | DESIGNATION  | MATERIAL                 |
| 1         | Valve Body   | Steel S355J2G3 / 1.0570  |
| 2         | Bonnet       | CF8 / 1.4308             |
| 3         | * Actuator   | Steel Fe410.1/St.Steel   |
| 3.1       | * Spring     | Spring Steel             |
| 4         | * Diaphragm  | NBR 70                   |
| 5         | Yoke         | Carbon Steel/St.Steel    |
| 6         | * Valve Plug | Hardened St. Steel       |
| 6.1       | * Valve Seat | Hardened St. Steel       |
| 7         | Packing      | Graphite                 |
| 8         | Valve Lever  | Stainless steel / 1.4301 |

\* Available spare parts.

| DIMENSIONS ( mm ) - VALVE BODY ANSI FLANGES |               |               |    |     |     |     |               |              |
|---|---------------|---------------|----|-----|-----|-----|---------------|--------------|
| DN  | A<br>ANSI 150 | A<br>ANSI 300 | B  | C   | D1  | F   | * WGT.<br>Kgs | **WGT<br>Kgs |
| 3/4"  | 150           | 150           | 71 | 75  | 175 | 490 | 22            | 19           |
| 1"  | 160           | 160           | 71 | 75  | 175 | 490 | 22            | 19           |
| 1 1/4"                                      | 180           | 180           | 75 | 83  | 175 | 490 | 26            | 23           |
| 1 1/2"                                      | 230           | 230           | 82 | 97  | 175 | 640 | 30            | 28           |
| 2"  | 230           | 230           | 97 | 100 | 175 | 640 | 40            | 38           |

| Type   | ø E<br>(mm) | D (mm)            |              |
|--------|-------------|-------------------|--------------|
|        |             | DN15-100<br>DA/RA | DN125-200 DA |
| PA-205 | 210         | 235               | N/A          |
| PA-280 | 275         | 240               | N/A          |

\* Valve with pneumatic actuator ; \*\* Valve with manual lever only

Consult factory for certified dimensions

Some face to face dimensions are not standard,due to market trend.

Other dimensions under request.

| FLOW RATE COEFFICIENTS |      |      |      |      |      |
|------------------------|------|------|------|------|------|
|                        | DN20 | DN25 | DN32 | DN40 | DN50 |
| Kvs                    | 6    | 9,4  | 15,4 | 24   | 30   |

Kvs in m<sup>3</sup>/h, see data sheet IS PV10.00 E;

For conversion Kvs = Cv(US) x 0,855

| VALVE STROKE IN mm |      |      |      |      |      |
|--------------------|------|------|------|------|------|
|                    | DN20 | DN25 | DN32 | DN40 | DN50 |
| Stroke             | 12   | 12   | 12   | 12   | 12   |

**MAX. PERMISSIBLE PRESS.DROP IN bar - Normally closed valve  
(fluid to close) - Reverse action actuator (air signal to open)**

| ACTUATOR<br>(Pressure) | MIN. AIR<br>PRESSURE |      |      |      |      |      |
|------------------------|----------------------|------|------|------|------|------|
|                        |                      | DN20 | DN25 | DN32 | DN40 | DN50 |
| PA-205<br>(0 - 1 bar)  | 3,5 bar              | 25   | 25   | 25   | 25   | 15   |
| PA-280<br>(0 - 1 bar)  | 3,5 bar              | —    | —    | —    | —    | 25   |

**Important:**

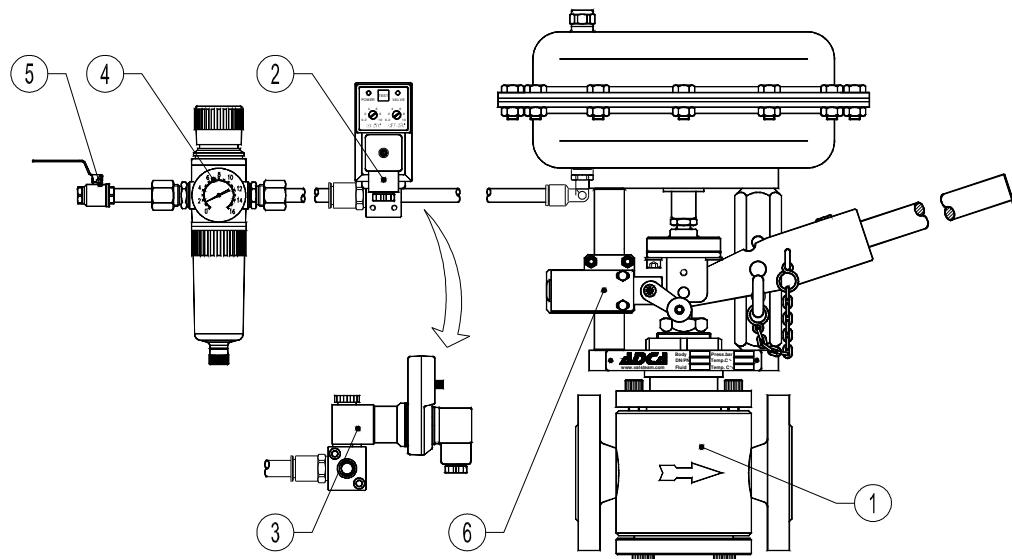
The pressure drop values are referred to closed valves.

For valve sizes DN65 and above please consult.

Special spring drops available on request.

The pressure drop values must be used within the body rating limits.

**TYPICAL INSTALLATION**



| Position | Designation                       |
|----------|-----------------------------------|
| 1        | VPA26 Blowdown Valve              |
| 2        | ADCA Digital Timer plus Connector |
| 3        | ADCA Solenoid Valve 3/2           |
| 4        | ADCA P10 Air Filter Regulator     |
| 5        | Ball Valve                        |
| 6        | Limit Switch                      |