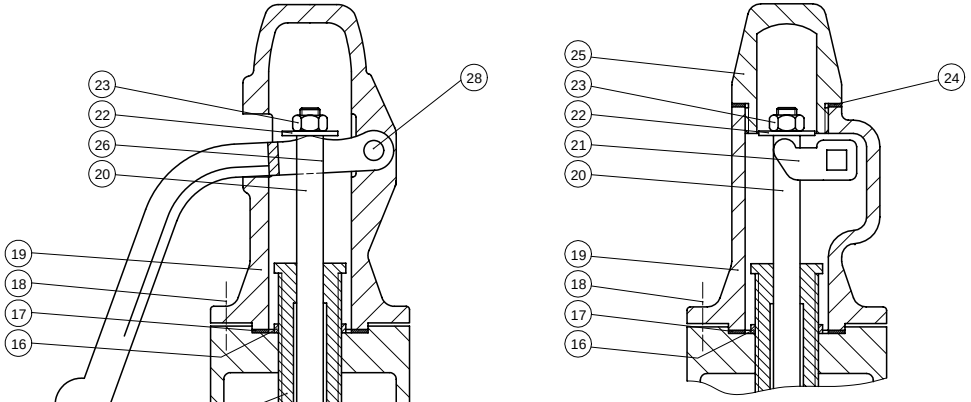
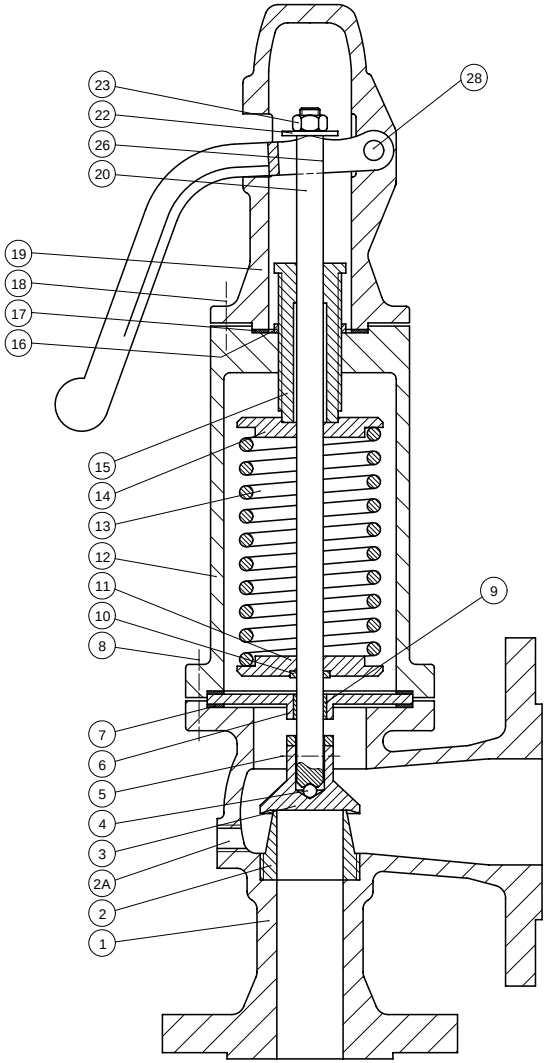


Type 356 – closed lever



Type 357 – open lever

Before any work is carried out on the valve ensure that the valve is totally isolated from any pressure in the pipeline. Do not attempt to strip valve without first relaxing the compression on the spring.

Installation

In selecting and installing safety valves the relevant safety regulations should be observed.

Safety valves with ground metal sealing surfaces are sensitive to contamination. Various means are used to protect the sealing surfaces from damage by dirt during transport. These should not be removed on site until immediately before installation of the valves. Damage to the face will show in a leak through the valve and it will need to be stripped and cleaned.

The operating pressure of the section of the plant should be sufficiently below the closing pressure (re-seat pressure) of the safety valve so that satisfactory re-seat is achieved after blow-off.

At installation, ensure that the system (e.g. pressure vessel, boiler or piping) is internally clean and free from rust. during initial pressure test of the system, the safety valve should be fully opened manually, so that any foreign matter still present, or which becomes detached (scale, beads of weld metal) is blown out. Take this opportunity to check that the free lift of the valve has not been affected by damage in transport.

The valve must be installed vertically so that the spindle (20) which transmits force between the lid (3) and the spring (13) is vertical. Gaskets at the connection flanges must not constrict the free passage at the inlet or outlet.

The body of the valve is provided with a threaded drain connection (2A). It must not be closed. Connect to drain off system by the 1/4" plug at the back of the valve, install outlet line at an incline and drain.

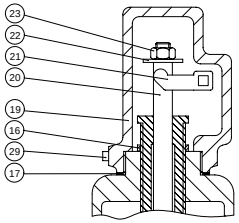
After the system has been put into service, the safety valves should be kept free from gross external contamination. Even where regulations do not prescribe it, the reliable functioning of each safety valve should be checked from time to time, (on the set pressure being exceeded, or on manual lifting when 85% of the set pressure has been reached).

The spindle and cone can be rotated, but this should only be done when the valve is open since otherwise, with force applied, the sealing surfaces can be damaged by rubbing. The valve can be opened manually by means of the lifting lever (26) or by raising the pressure above the set pressure.

The safety valves are adjusted to the desired set pressure and sealed.

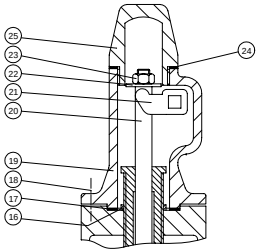
Altering set pressure

DN 25 – 50 356 closed lever



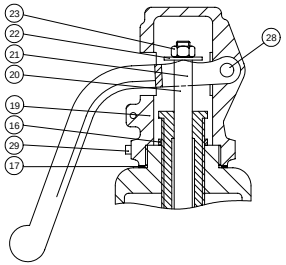
- Remove screw (29)
- Move vent lever to down position
- Unscrew lever housing (19)
  1 Loosen locking ring (16)
  2 Adjust adjusting screw (15) until desired set pressure is achieved (Turning screw clockwise will increase pressure, anti-clockwise to reduce)
  3 Re-assemble in reverse order.

DN 65 -100 closed lever



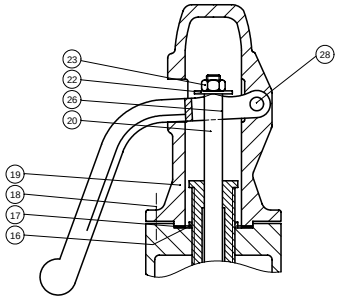
- Remove hexagonal bolts (18)
- Move lever downwards to vertical position
- Remove lever housing (19)
- Adjust spring as in 1 to 3 above

DN 20 – 50 open lever



- Remove pin (28)
- Withdraw lever sideways
- Remove screw (29)
- Remove lever housing (19)
- Adjust spring as in 1 to 3 above

DN 65 – 100 open lever



- Remove pin (28)
- Withdraw lever sideways
- Remove hexagonal bolts (18)
- Remove lever housing (19)
- Adjust spring as in 1 to 3 above

Make sure that the spindle is secured against movement during spring adjustment as friction can damage the sealing faces.

Safety warnings

- Before stripping the valve it should be totally isolated from any pressure in the pipeline - beware leaking isolating valves.
- Lead seals and wire are fitted to the valve lever housings to ensure integrity of the factory setting – if these are missing then the safety valve set pressure should be verified before use on the system.
- The valve may be heavy so care should be exercised when lifting the valve – check mass of valve before any attempts to lift it are made.
- Valve inlet and outlet ports are blanked off when leaving the factory – these coverings should be left in place until valve is ready to be fitted to the pipeline.
- Care should be exercised to ensure that no blockages of the inlet port can occur during fitting as this could render the valve inoperable or impair it's performance.
- The valve may discharge unexpectedly and therefore it should be approached with extreme caution whilst it is subjected to system pressure.
- The valve may get hot during operation and therefore care should be exercised if working close to it.
- When fitting the valve to the line, ensure that the valve spindle is not rotated as this will cause damage to the valve faces and cause the valve to malfunction.