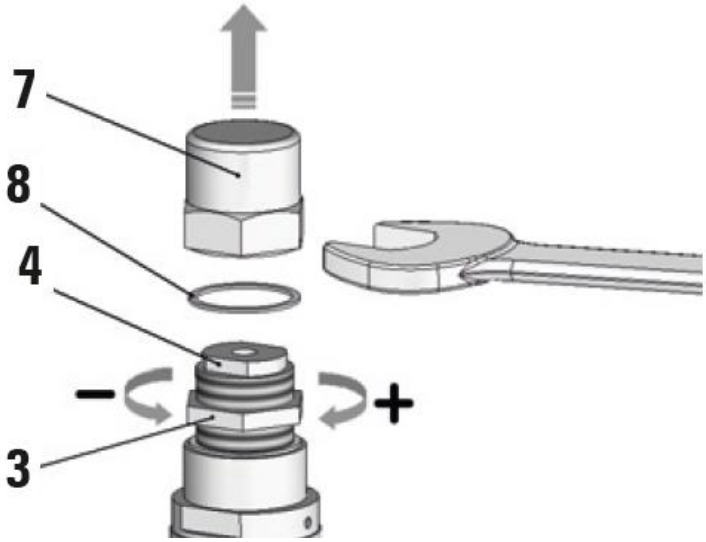
CT5-1 – INSTALLATION AND OPERATING MANUAL



1. General Notes of Safety
   - 1.1 Only use the valve for the intended purpose, in satisfactory condition, with respect for safety and potential hazards.
   - 1.2 Always observe the installation instructions.
   - 1.3 Faults that may impair safety must be addressed immediately.
   - 1.4 The valves are exclusively intended for the application area stated in these installation instructions. Any other or further use is not valid as the intended use.
   - 1.5 The manufacturer's warranty for the setting of the valve shall be null and void if the sealed cover is removed.
   - 1.6 All assembly work is to be carried out by authorized specialist staff.

2. General Notes
   - 2.1 Pressure limiting valves are high quality fittings which require careful handling.
   - 2.2 The sealing surfaces are precision-machined at the seat and cone to attain the required seat tightness.
   - 2.3 Always avoid the penetration of foreign particles into the valve during assembly and operation.
   - 2.4 The tightness of a pressure limiting / overflow valve can be impaired when using hemp, Teflon tape, as well as through welding beads, amongst other things.
   - 2.5 If the valves are painted, make sure that the sliding parts do not come into contact with the paint.

3. Range of Application
   - 3.1 As a Pressure Limiting Valve: for non-adhesive liquids, gas, steam for protection against excess pressure in pressure tanks or steam boilers as well as pressure-holding equipment parts for pressure devices in compliance with the EC pressure equipment directive.
   - 3.2 As an Overflow Valve: for non-adhesive liquids gas and steam for pressure limitation and/or regulation, for protection of pumps and as bypass valve. Overflow valves can also be used if there is counter pressure.

4. Installation and Assembly
   - 4.1 To ensure a satisfactory operation of the valves they must be assembled in such a way that the safety valve is not exposed to any impermissible static, dynamic or thermal loads.
   - 4.2 The installation has to be flushed before installing the valve. If an installation is not sufficiently cleaned or the valve is installed improperly, the valve may leak even the first time it responds.

4.3 Appropriate safety measures must be taken at the place of installation of the valves if the medium that discharges upon actuation of the valve can lead to direct or indirect hazards to people or the environment.

4.4 Pressure limiting valves are to be installed vertically, if possible, and with the bonnet pointing upward. A different installation position must be clarified with the manufacturer.

4.5 Overflow valves can be installed in any position. The function of the valves is guaranteed in every position.

4.6 During assembly always make sure not to apply any force when fastening the connecting thread and not to screw it in too far, as this could damage the seat of the valve. Do not allow sealing material such as hemp or Teflon to penetrate into the valve.

5. Setting

5.1 The valves can be delivered with a set pressure and sealed by the factory or without set pressure with the desired range of adjustment.

5.2 Valves which have been set and sealed by the factory are marked with the set pressure. Before changing the set pressure the seal has to be removed. If valves are unsealed, the desired pressure can be set within the pressure range of the spring.

5.3 In the case of ATEX versions for categories 1 and 2 and unset gastight valve versions, the valves must be tested after setting in order to guarantee their gas tightness.

5.4 Setting Procedure;

a) Unscrew the cap nut (7) and remove the copper gasket (8).
b) Release locknut (3).
c) Turn pressure screw (4): Clockwise to increase the set pressure, counter clockwise to reduce the set pressure.
d) Tighten the locknut (3) again and mount the copper gasket (8).
e) Screw on the cap nut (7) and tighten.

6. Operating and Maintenance

6.1 The operating pressure of the plant is to be at least 5% lower than the closing pressure of the valve if it is used as a pressure limiting valve. In this way, the valve can satisfactorily close again after blowing off.

6.2 In the event of minor leaks, the valves can be made to respond by applying overpressure. If this does not remove the leak the valve has to be overhauled. After long periods of non-use the function of the valve must be tested.

7. Warranty

Every valve is tested prior to leaving the factory. We grant a warranty for our products which entails the repair, free of charge, of any parts that are returned and verified as being prematurely unsuitable for use due to defective material or manufacturing. We shall not assume liability for any damage or other such obligations. If the factory seal is damaged (in the case of pressure limiting valves), in the event of any incorrect handling or installation, contamination or normal wear, warranty claims shall be null and void.

8. Marking

Valves adjusted at the factory have the set pressure stamped on the valve body.