

## AUTOMATIC WATER PUMPING STATIONS

We offer a selection of automatic water pump sets of wide range of capacities which we can tailor to each customer's specific requirements.

### CONSTRUCTION:

Each automatic water pumpstation includes:

1. CR Grundfos pumps or from other manufacturers (number of pumps in the set depends on required pressure at the set outlet)
2. Support frame made of high quality stainless steel or hot galvanized carbon steel
3. Shut off valves on pump suction and pressure pipelines (threaded ball valves for pipeline diameter 25 - 65 mm , hand lever butterfly valves for pump pipe diameters above 65 mm)
4. Check valves on pressure pipeline (threaded check valves for pipeline diameters 25 - 65 mm or inter-flanged wafer check valve for pipe diameters above 65 mm)
5. Flow expansion vessel ( $V=4-8 \text{ dm}^3$ ) installed on pressure manifold
6. Dry run sensor
7. Dial manovacuometer  $p=1.0 \text{ MPa}$
8. Dial manometer  $p=0.6 \text{ do } 1.0 \text{ MPa}$
9. Presostat KP-36,  $p=1.0 \text{ MPa}$
10. Pressure transducer up to 1.0 MPa
11. Pressure manifold dia. 25 - 400 mm made of galvanized or stainless steel flanged tubes
12. Suction manifold dia. 25 - 400 mm made of galvanized or stainless steel flanged tubes
13. Control cabinet (mounting options: wall mounting, on a separate stand by the pump set or on the pump set support frame)

### CONTROL SYSTEMS

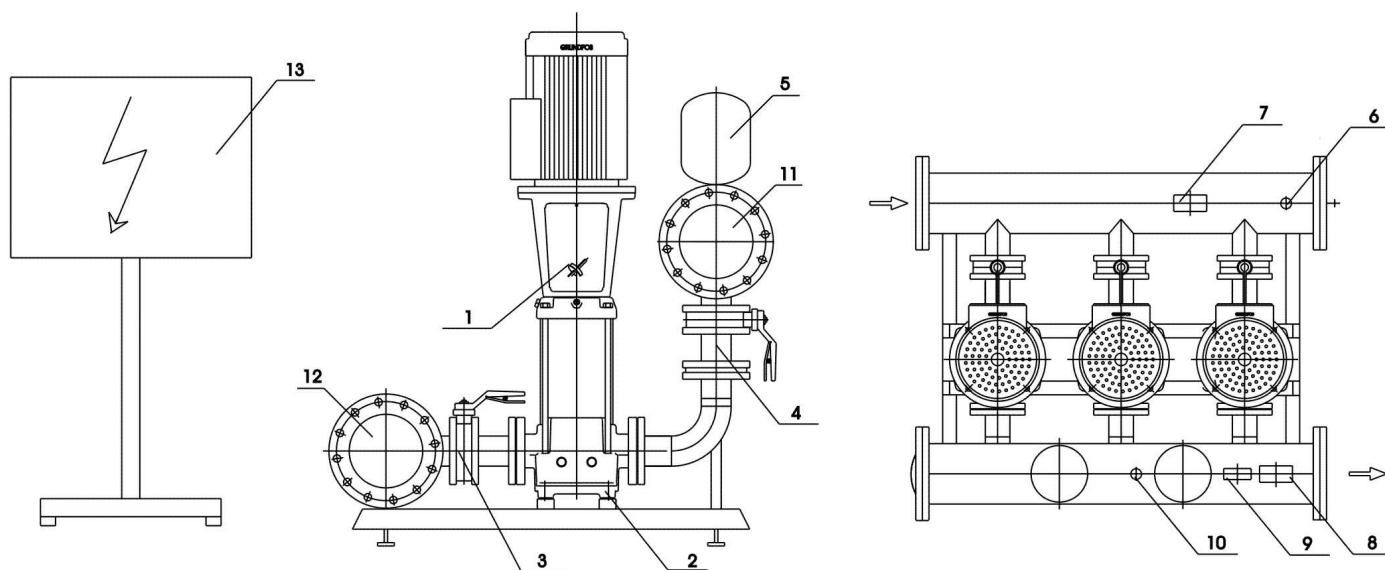
The pumps are automatically controlled to supply the actual water demand. The following control systems are available:

1. Inverter control with microprocessor pressure controller for stepless control.
2. Microprocessor pressure controller cascade regulation.

The method selection depends on the available water supply conditions, required outlet parameters and planned investment/operating costs.

### WATER SUPPLY TO PUMPSTATION

1. For the cascade control: directly from the water line if the pressure fluctuations on the supply side do not exceed  $\pm 5 \text{ m}$  water column.
2. For the inverter control: directly from the water line irregardless of pressure fluctuations.
3. From an unpressurized water tank with the minimum water table above the suction manifold level of the pump set.
4. From an unpressurized water tank with the minimum water table level below the suction manifold of the pump set (priming pump required).



**Our automatic water pump stations have the applicable approvals of the National Institute of Hygiene.**