



Tender specification:

The Oventrop adjustable straight pattern valve “Aquastrom K” serves to achieve a hydronic balance in cold water circulation systems. With insulation shell avoiding condensation. When combined with the corresponding accessories, the can also be used for flush-mounted or front-wall installation.

WRAS certified

Application:

The double regulating and commissioning valves “Aquastrom K” are straight pattern valves without dead zone for use in cold water circulation systems. The hygiene in hot potable water installations is guaranteed by operating a circulation system but cold water systems are also prone to the formation of germs and micro-organisms. To avoid stagnation and temperatures exceeding 25 °C, a cold water circulation can be realised with the help of the “Aquastrom K” valves. A contamination of the potable water can be noxious for ill or injured people and lead to serious problems in high risk locations such as hospitals, retirement homes or public showers and draw off points.

Technical data:

Domestic water installations: PN 10 up to 50 °C

Adjustable temperature range: 6 °C up to 18 °C
(item no 4205904)

12 °C - 24 °C
(item no. 4206304)

Factory setting: 8 °C ± 1 °C
(item no. 4205904)

20 °C ± 1 °C
(item no. 4206304)

Residual volume flow: $k_v = 0.05$

Installation position: any, but easily accessible

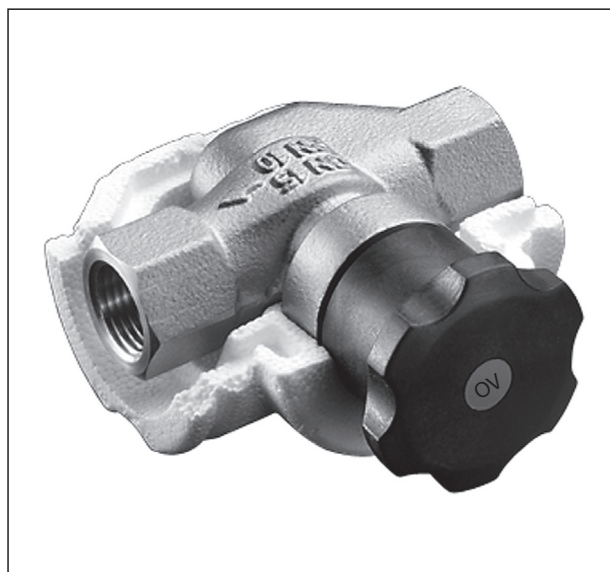
Max. differential pressure: 1 bar

Models:

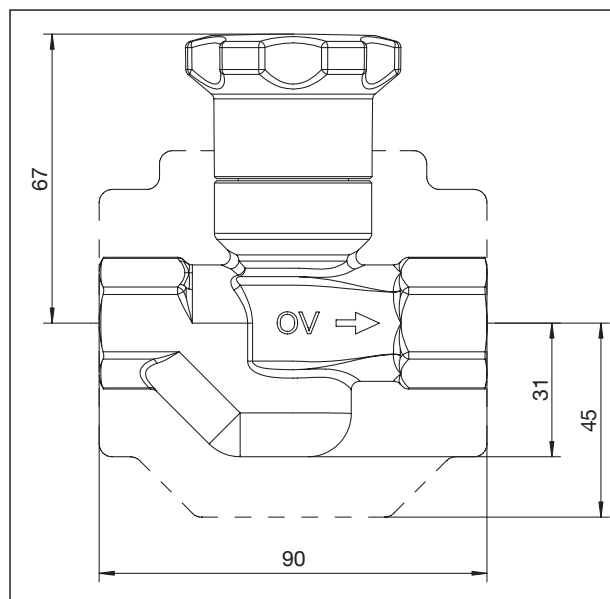
both ports female thread according to EN 10226-1

	DN 15	4205904
6 °C - 18 °C		
12 °C - 24 °C	DN 15	4206304

Item no.:



“Aquastrom K”



Dimensions

Description and function:

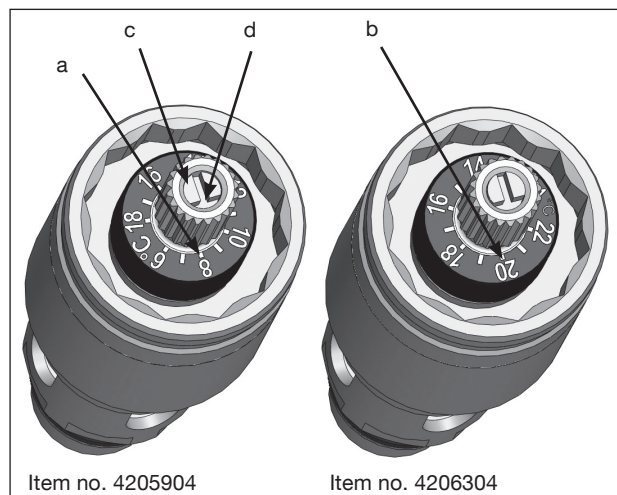
The thermostatic valve “Aquastrum K” serves to achieve the hydronic balance in a potable water circulation system. If the set temperature which is adjustable between a minimum of 6 °C and a maximum of 18 °C (item no. 4205904) or a minimum of 12 °C and a maximum of 24 °C (item no. 4206304) is exceeded, the valve opens and the cold water circulation in the concerned section of the riser is increased until the temperature set at the valve is reached again. If the set temperature is undercut, the volume flow returns to a residual volume flow of $k_v=0.05$. The restored hydronic balance guarantees the supply of the subsequent risers.

The valve also serves the isolation of the riser for maintenance or repair.

When used in conjunction with the accessories of the “Aquastrum UP” range, the “Aquastrum K” valves can also be used for flush-mounted or front-wall installation or as lockshield model.

Setting of the nominal temperature value:

The regulating insert is accessible after having pulled off the handwheel.



The nominal temperature value at which the valve opens can be set at the inner stem (pos. 3) with a flat screwdriver. When leaving the factory, the valve is set to 8 °C (item no. 4205904) (pos. 1) or 20 °C (item no. 4206304) (pos. 2).

The temperature is adjusted by setting the flattened side of the stem (pos. 4) to the require nominal temperature value. The minimum value amounts to 6 °C (item no. 4205904) or 12 °C (item no. 4206304)!

Temperature increase:

Turn anticlockwise.

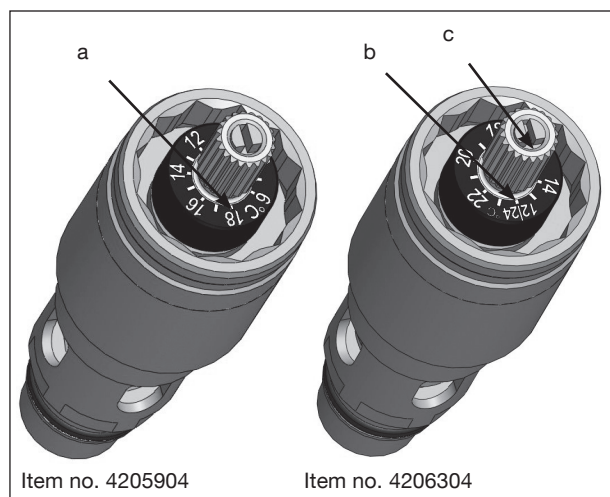
Temperature reduction:

Turn clockwise.

The calibrating range must not be exceeded!

Checking the calibration:

The calibration of the valve can be checked as follows:



- Turn the nominal temperature value to 18 °C (item no. 4205904) (pos. 1) or 24 °C (item no. 4206304) (pos. 2) with the flattened side of the stem (pos. 3).
- The calibration range is correct if the inner setting stem and the outer splined stem are at the same level. If this is not the case, wrong temperature values will be reached during operation.
- If the two stems are not at the same level at a setting of 18 °C (item no. 4205904) or 24 °C (item no. 4206304), the inner stem has to be turned by 360 °.

Note:

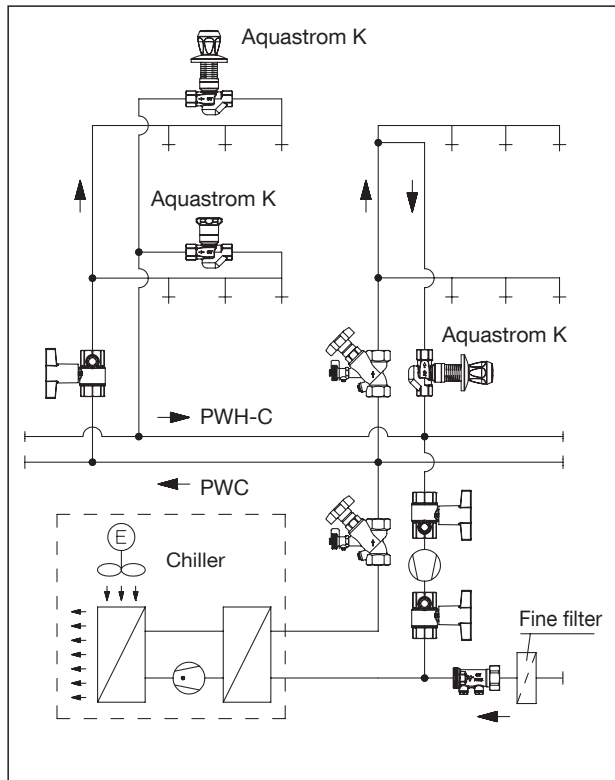
Install the valve in the flow direction (observe arrow on the valve body!) and bond insulation shells (supplied with the valve) with silicone to avoid condensation and damage to the brickwork.

Important:

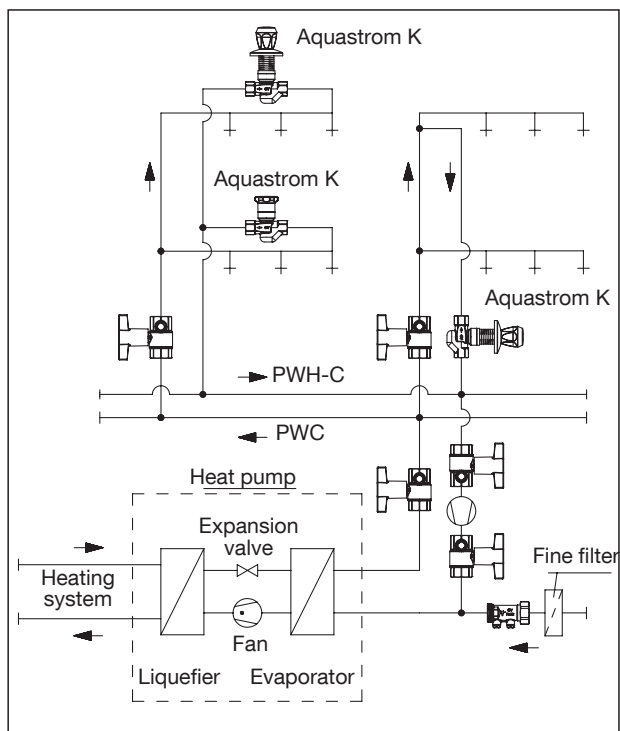
To guarantee a perfect regulation function, isolated valves must be opened completely when putting the system into operation again!

The pipework must be laid so that airlocks are avoided. Due to the flow velocity, bacterial zones may develop especially in the circulation return pipes. The pipework has to be flushed thoroughly before initial operation.

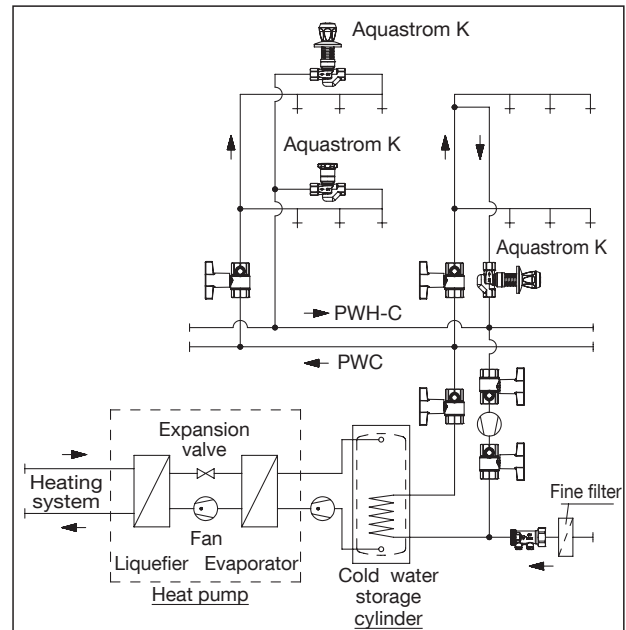
To avoid damage to the pipework and valves and malfunctions caused by calcification, the fitting of water treatment equipment is recommended if the water is very calciferous. The national guidelines must be observed!



System illustration with chiller



System illustration with heat pump



System illustration with heat pump and cold water storage cylinder

Accessories:

Spare valve insert
 cold water module
 adjustable between 6 °C and 18 °C
 Factory setting: 8 °C
 Item no. 4205990

Spare valve insert
 cold water module
 adjustable between 12 °C and 24 °C
 Factory setting: 20 °C
 Item no. 4205992

Spare insulation shells
 with fixing clamps
 Item no. 4229050

Thermometer 0 °C - 30 °C
 for potable water temperature control
 with draining valve for hose connection G ¼ - DN 8
 Item no. 4205991

Accessories for flush-mounted installation:

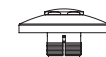
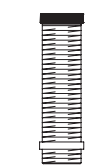
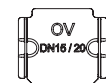
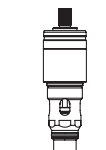
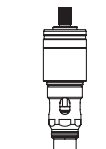
Flush-mounting pipe with toothed spindle
 and protection/operating cap
 Item no. 4229015

Handwheel set, chrome plated
 Item no. 4229001

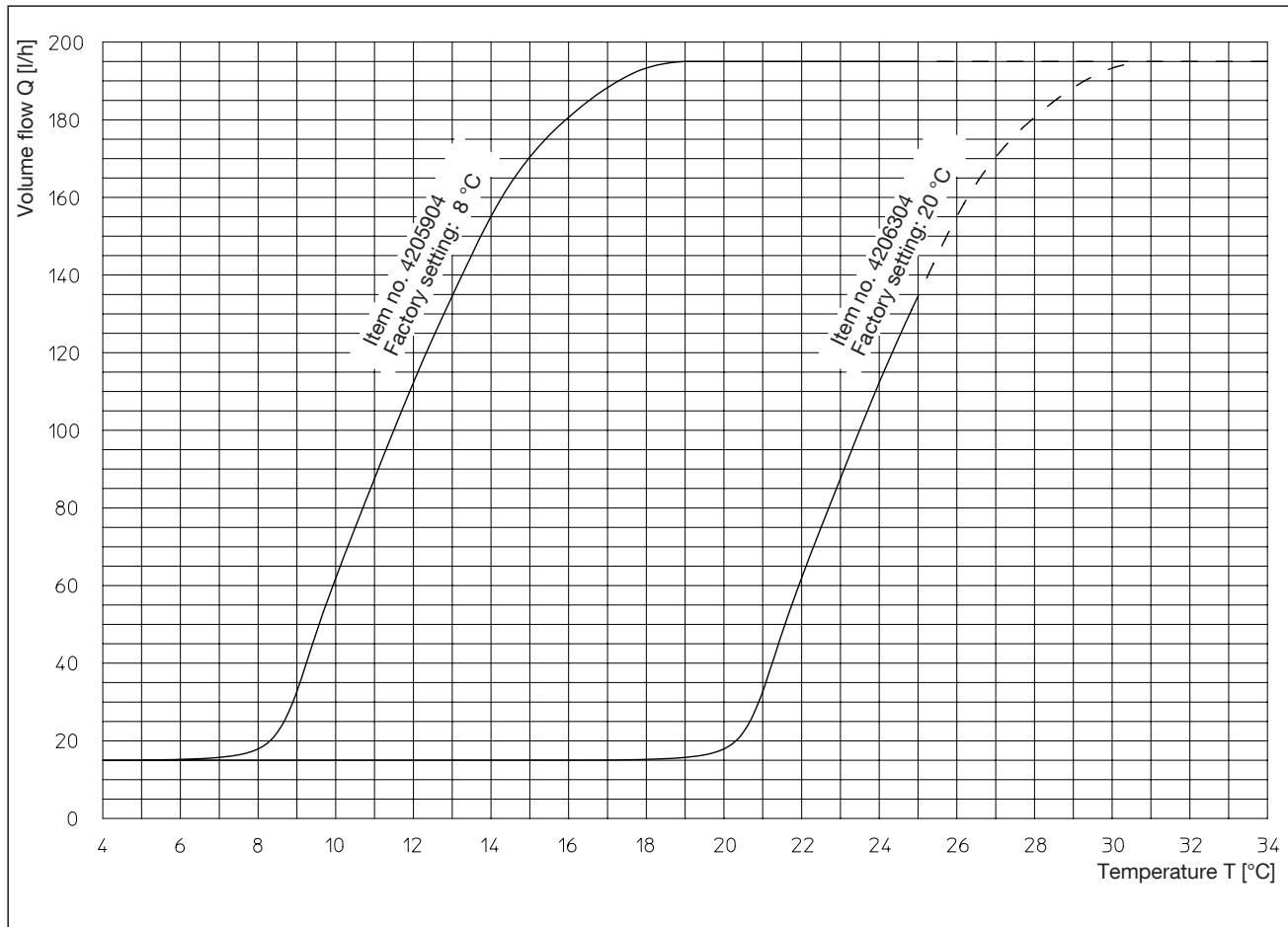
Lockshield bonnet set, chrome plated
 Item no. 4229010

Pipe socket wrench for flush-mounted valves
 Item no. 4229035

Mounting set for
 front-wall installation
 Item no. 4229020



“Aquastrom K”
Thermostatic cold water circulation valve with temperature setting



Control characteristics “Aquastrom K” (measured at $\Delta P = 100$ mbar)

Subject to technical modifications without notice.

Product range 12
 ti 271-EN/10/MW
 Edition 2017