

### Double regulating and commissioning valves „Aquastrom C” for circulation pipes in potable water systems according to DIN 1988 - PN 10 for hot water central heating systems and cooling systems - PN 16



The Oventrop Quality Management System is certified to DIN-EN-ISO 9001

#### Function:

Oventrop bronze double regulating and commissioning valves „Aquastrom C” are installed in circulation pipes of potable water systems and serve to achieve a hydraulic balance between the various circuits of the system.

Alternatively, they may also be installed in hot water central heating systems and cooling systems between  $-20^{\circ}\text{C}$  and  $+150^{\circ}\text{C}$ . Pressure range PN 16 (PN 25 for female threaded model).

The balance is achieved by a presetting with memory position.

The required values of presetting can be obtained from the flow charts. All intermediate values are infinitely adjustable.

The selected presetting can be read off two scales (basic scale and fine adjustment scale, see illustration presetting). The Oventrop double regulating and commissioning valves have two threaded ports closed with a blind plug and a location plug which is equipped with a dial thermometer. Alternatively, fill and drain ball valves or pressure test points for differential pressure measurement may be mounted.

When installing the valve, it is to be observed that the direction of flow conforms with the arrow on the valve body and that the valve is installed with a minimum of 3 D (3 x nominal pipe diameter) of straight pipe in the upstream side.

#### Advantages:

- the location of the functioning components on one level allows a simple assembly and easy operation
- only one valve for 5 functions
  - presetting
  - isolating
  - temperature indication
  - draining (drain valve see accessories)
  - measuring (pressure test points see accessories)
- infinitely adjustable presetting, exact measurement of pressure loss and flow by use of the pressure test points
- plug, drain valve and pressure test points with O-ring seal towards the valve body



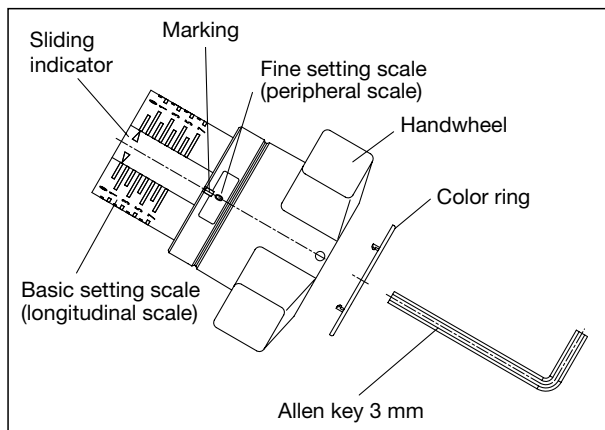
„Aquastrom C“ both ports with male thread



„Aquastrom C“ both ports with female thread

**Presetting:**

1. The value of presetting of the double regulating and commissioning valve is set by turning the handwheel.
  - a. The display of the basic setting is shown by the longitudinal scale together with the sliding indicator. Each turn of the handwheel is represented by a line on the longitudinal scale.
  - b. The display of the fine setting is shown by the peripheral scale on the handwheel together with the marking. The subdivisions of the peripheral scale correspond to 1/10th of a turn of the handwheel.
2. Limitation of the set value of presetting by turning the inner adjustment stem clockwise until it seats. This can be done by using the long end of a 3 mm Allen key.



**Double regulating and commissioning valve "Aquastrom C"**

**Tender specification:**

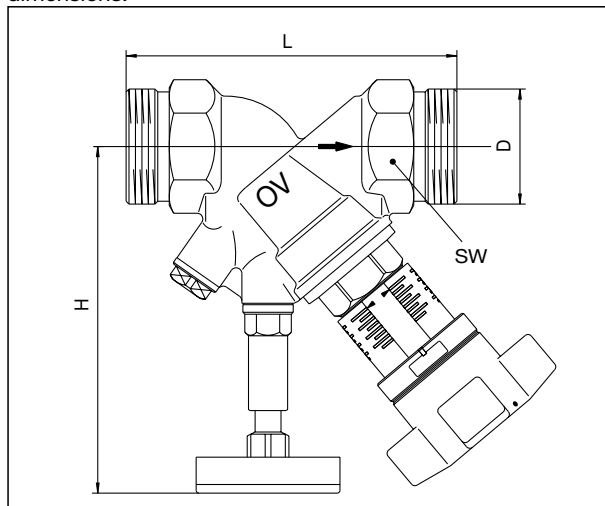
Double regulating and commissioning valves PN 10 for potable water systems, both ports with male thread according to ISO 228 for flat sealing couplings, temperature range up to 95°C. Oblique pattern with secured, infinitely adjustable fine presetting controllable at any time; dial thermometer for temperature control, optical display of the presetting depending on the position of the handwheel, valve body and bonnet made of bronze, disc and stem made of dezincification resistant brass, disc with PTFE seal, maintenance-free stem seal due to double O-ring, all functioning components on one level.

Alternative use in hot water central heating systems and cooling systems PN 16, between -20°C and +150°C.

Double regulating and commissioning valves both ports with male thread according to ISO 228 for flat sealing couplings

DN	Item no.
DN 15 3/4"	420 71 04
DN 20 1"	420 71 06
DN 25 1 1/4"	420 71 08
DN 32 1 1/2"	420 71 10

both ports male thread according to ISO, item no. 420 71 . . . , dimensions:



DN	D DIN ISO 228	L	H	SW*
15	3/4"	88	114	27
20	1"	93	116	32
25	1 1/4"	110	121	41
32	1 1/2"	110	133	46

**Double regulating and commissioning valve "Aquastrom C"**

**Tender specification:**

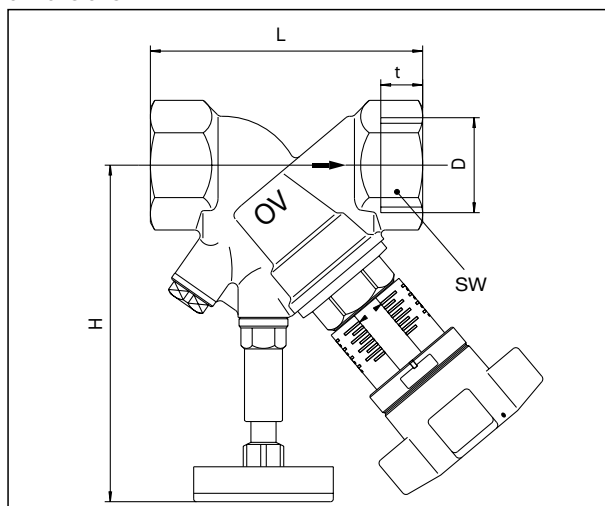
Double regulating and commissioning valves PN 10 for potable water systems, both ports with female thread according to DIN 2999, temperature range up to 95°C. Oblique pattern with secured, infinitely adjustable fine presetting controllable at any time; dial thermometer for temperature control, optical display of the presetting depending on the position of the handwheel, valve body and bonnet made of bronze, disc and stem made of dezincification resistant brass, disc with PTFE seal, maintenance-free stem seal due to double O-ring, all functioning components on one level.

Alternative use in hot water central heating systems and cooling systems PN 25, between -20°C and +150°C.

Double regulating and commissioning valves both ports with female thread according to DIN 2999

DN	Item no.
DN 15 1/2"	420 81 04
DN 20 3/4"	420 81 06
DN 25 1"	420 81 08
DN 32 1 1/4"	420 81 10

both ports female thread according to DIN, item no. 420 81 . . . , dimensions:

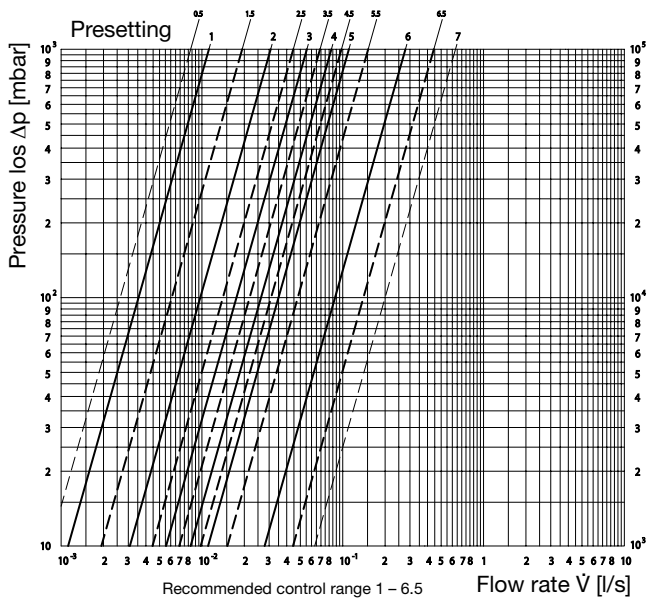


DN	D DIN 2999	t	L	H	SW*
15	1/2"	13.2	80	114	27
20	3/4"	14.5	84	116	32
25	1"	16.8	97.5	121	41
32	1 1/4"	19.2	110	133	49

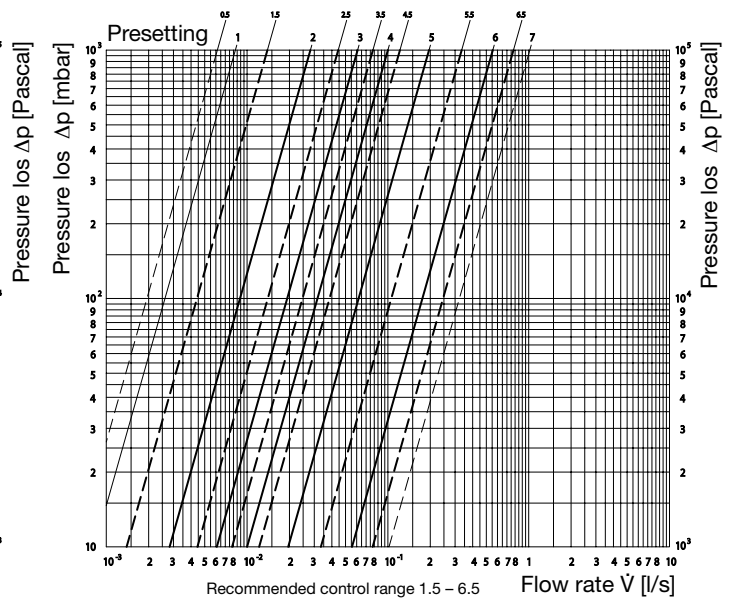
**Accessories:**

1 drain valve	420 01 91
1 dial thermometer	420 51 51
2 pressure test points	106 02 81
further accessories see "Hydrocontrol R"	

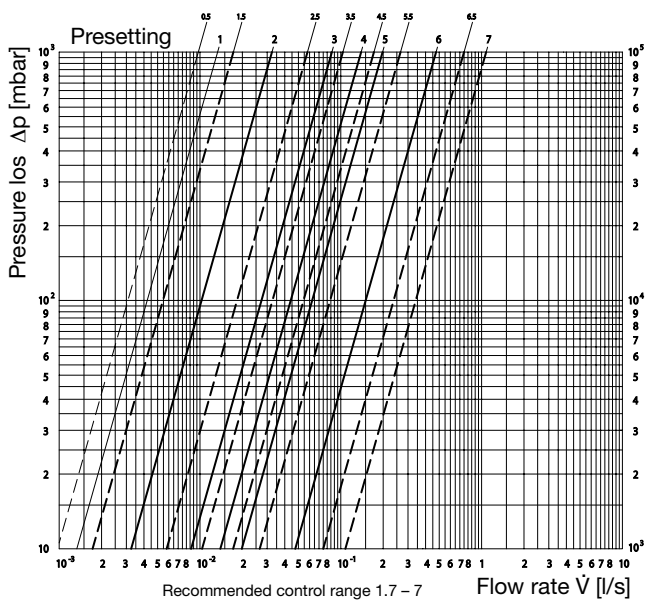
\* SW = spanner size



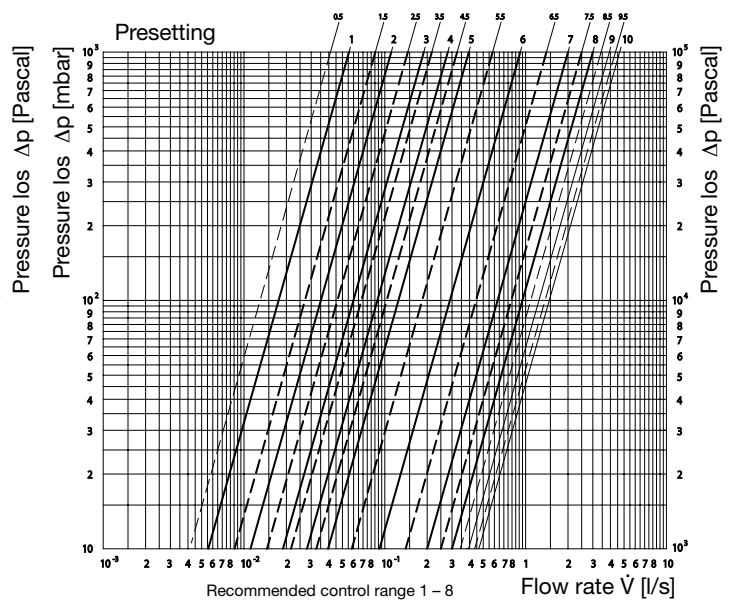
Size DN 15



Size DN 20

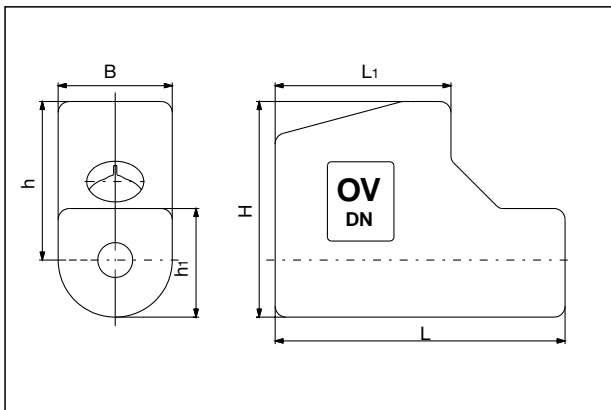


Size DN 25



Size DN 32

**Insulation shells:**



**Item nos.:**

DN 15	106 00 81
DN 20	106 00 82
DN 25	106 00 83
DN 32	106 00 84

**Dimensions:**

DN	B	L	L <sub>1</sub>	H	h	h <sub>1</sub>
15	72	183	111	136	100	69
20	80	195	122	143	103	77
25	88	243	141	151	107	85
32	102	254	149	172	121	97

**Tender specification:**

Insulation shells made of Polyurethane, double shells with tongue-and-groove fitting.

**Accessories sets:**

**Set 1: 1 drain valve 1/4"**

with hose connection 3/8" and cap  
(components coming into contact with water are made of non-brass materials)

**Set 2: Tailpipe with male thread according to DIN 2999 (bronze), with collar nut and ring gasket**

DN	Connction thread valve	L <sub>1</sub>	D <sub>1</sub> nach DIN 2999
15	3/4"	31	1/2"
20	1"	34	3/4"
25	1 1/4"	40	1"
32	1 1/2"	46	1 1/4"

**Set 3: Tailpipe with female thread according to DIN 2999, with collar nut and ring gasket**

DN	Size
15	1/2" x 3/4" collar nut (brass)
20	3/4" x 1" collar nut (brass)
25	1" x 1 1/4" collar nut (bronze)
32	1 1/4" x 1 1/2" collar nut (bronze)

**Set 4: Solder tailpipe (bronze), with collar nut and ring gasket**

DN	Connction thread valve	L <sub>2</sub>	D <sub>2</sub>
15	3/4"	18	15
15	3/4"	20	18
20	1"	23	22
25	1 1/4"	27	28
32	1 1/2"	32	35

**Set 5: Weldable tailpipe (steel), with collar nut and ring gasket**

DN	Connction thread valve	L <sub>3</sub>	D <sub>3</sub>
15-32	3/4" - 1 1/2"	31,5-36	20,5-41

**Press fitting made of stainless steel**

DN	Connction thread valve	D <sub>4</sub>	L <sub>4</sub>
15	3/4"	15	40
15	3/4"	18	41
20	1"	22	43
25	1 1/4"	28	45
32	1 1/2"	35	54

**Set of compression fittings for copper pipe, compression nut and compression ring made of brass**

DN	G	D <sub>5</sub>
15	1/2"	10 mm
15	1/2"	12 mm
15	1/2"	14 mm
15	1/2"	15 mm
15	1/2"	16 mm
20	3/4"	18 mm
20	3/4"	22 mm

**"Combi-System" see catalogue "Products", product range 13 and Technical Information sheets DVGW Reg.-No. DW-8501AT2407**

Composition pipes "Copipe"

DN 10 (14 mm) - DN 50 (63 mm)

Press connections "Cofit P" with male thread

DN 12 (16 mm) - DN 50 (63 mm)

Press connections "Cofit P" with collar nut with flat seal

DN 12 (16 mm) - DN 50 (63 mm)

Compression fittings "Cofit S" with male thread

DN 10 (14 mm) - DN 25 (32 mm)

Double nipples "Cofit S"

for the connection to female threaded valves and controls

DN 12 (16 mm) - DN 25 (32 mm) (pipe dimension)

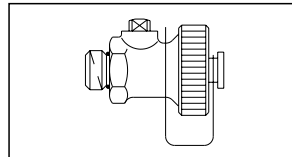
Connection pieces "Cofit S" with flat seal

for the connection to male threaded valves and controls  
DN 12 (16 mm) - DN 25 (32 mm) (pipe dimension)

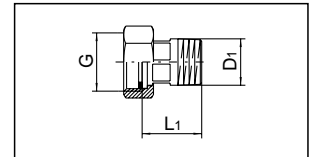
Subject to technical modification without notice.

Product group 13  
ti 154-1/10/MW

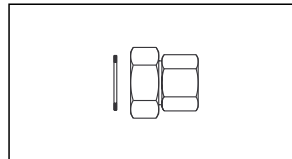
Printed on paper free from chlorine bleaching.



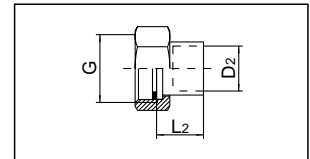
Set no. 1 Item no. 420 01 91



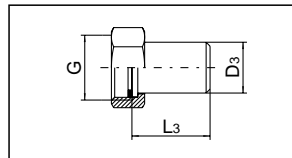
Set no. 2 Item no. 420 14 72-75



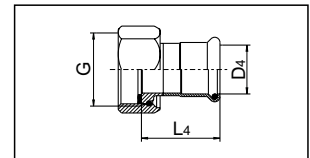
Set no. 3 Item no. 420 13 72-75



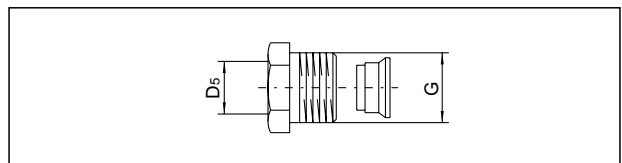
Set no. 4 Item no. 420 20 72-76



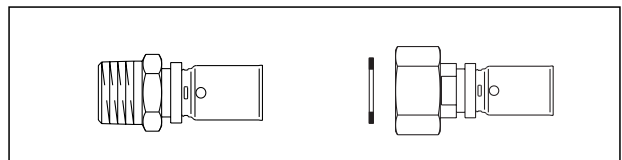
Set no. 5 Item no. 420 05 72-75



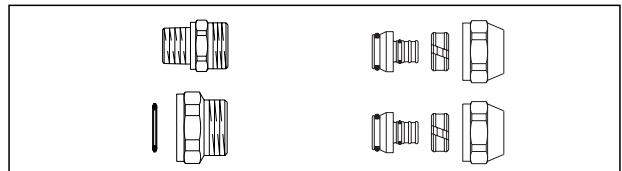
Item no. 420 15 72-76



Item no. 102 71 50-58



Connction technic "Cofit P" for female and male threaded connection



Connction technic "Cofit S" for female and male threaded connection

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