LEHRY VALVES

Where Flow and Pressure Meet Quality

SINCE-1950

BRASS BALANCING VALVE SCREWED END – PN 25

Application:

Lehry Static Balancing Valve,Double Regulating Valve(DN15-DN50) are installed in the pipework of hot water central heating systems and cooling systems and serve to achieve a hydronic balance between the various circuits of the system.

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.

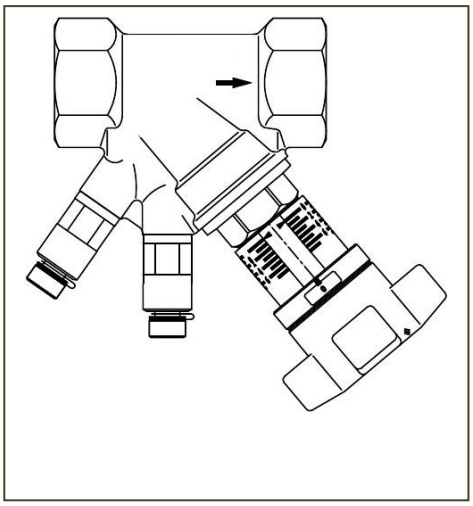
The selected presetting can be read off two scales (basic scale and fine adjustment scale). The Static Balancing Double Regulating and commissioning valves have 2 threaded ports for fill and pressure test points for the measurement of differential pressure. The double regulating and commissioning valves are delivered with 2 blind plugs.

The double regulating and commissioning valves may be installed in either the supply or the return pipe.

When installing the valve, it must be ensured that the direction of flow conforms to the direction of 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 at the valve inlet and of 2 D (2 x nominal pipe diameter) of straight pipe at the valve outlet.

The flow charts are valid for both, installation in the supply or the return pipe, provided the direction of flow conforms to the arrow embossed on the valve body.

In cooling systems using mixtures of water and glycol, the correction factors related to the indicated chart values have to be taken into consideration.



Features:

- The location of the functioning components on one side allows convenient assembly and easy operation
- One valve for all 5 functions:
  - presetting
  - measuring
  - isolating
  - filling
  - draining
- Infinitely adjustable presetting, exact measurement of pressure loss and flow via the pressure test points
- Threads according to EN 10226 (BS 21),
- Direct Reading measuring channel led around the stem assembly to the test points ensures the best possible accuracy between the differential pressure measured at the pressure test points and the actual differential pressure of the valve.

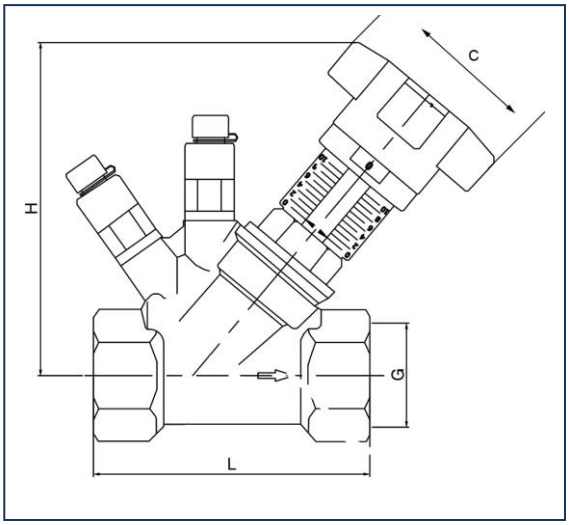
Tender specification:

Static Balance and Double regulating valve PN 25 (water pH value 6.5-10) both ports with female thread according to EN 10226 (BS 21), not suitable for steam. Oblique pat-tern with secured, infinitely adjustable fine presetting controllable at any time; optical display of the presetting depending on the position of the handwheel, valve and bonnet made of Brass CW617N , disc and stem made of brass resistant to de-zincification (DZR) Brass CW602N, disc with PTFE seal, maintenance-free stem seal due to double O-ring, all functioning components on one level, installation in the supply or the return pipe.

(Pressure loss charts, kv, see following pages) Max. working temperature ts: 120°C
Min. working temperature ts: -10°C
Max. working pressure ps: 25 bar (PN 25) (female thread, 15mm – 50mm)

Technical Description

PN (Pressure Rating)	: PN25
Connection Standard	: DN15 – 50 : Threaded Connection EN10226 (BS21)
Temperature	: DN 15 – 50 : -10°C ~ 120°C
Valve Body	: Brass CW617N
Valve Stem	: Brass CW617N FG260
Balancing Valve Core	: Brass CW617N
Hand Wheel	: Plastic ABS
Testing Point	: CW617N
Sealing	: EPDM Double O-Ring



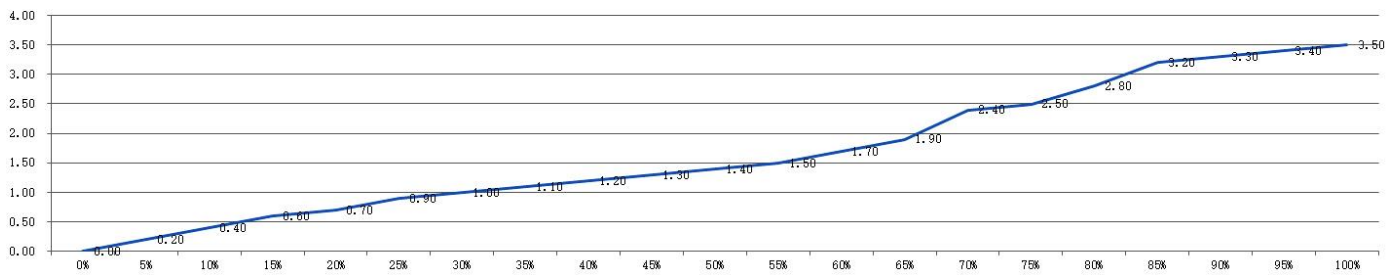
Available Size : - 15mm – 50mm

Dimensions **(All Dimension are in mm)**

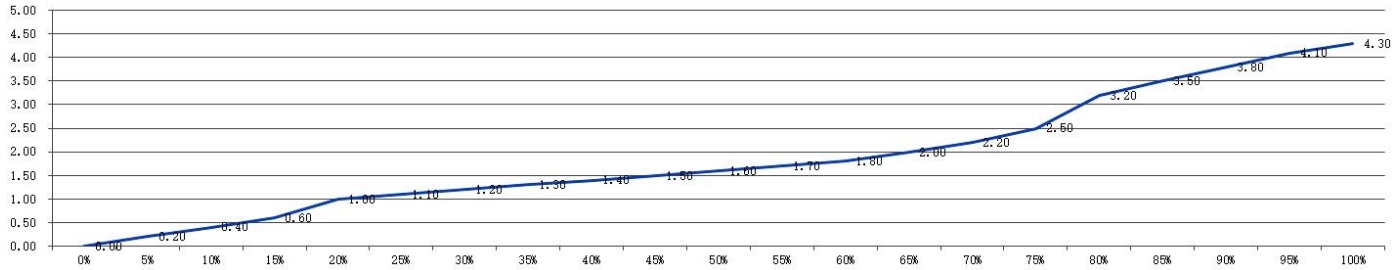
Size DN	Pn25 G	L	H	C	Kvs	Temp (°C)
15	15	77.5	97	70	3.5	Brass (-10 ~ 120°C)
20	20	77.5	97	70	4.3	
25	25	93.5	100	70	6	
32	32	105	114	70	9.49	
40	40	120	123	70	18.89	
50	50	140	131	70	28.38	

Flow Coefficient Value

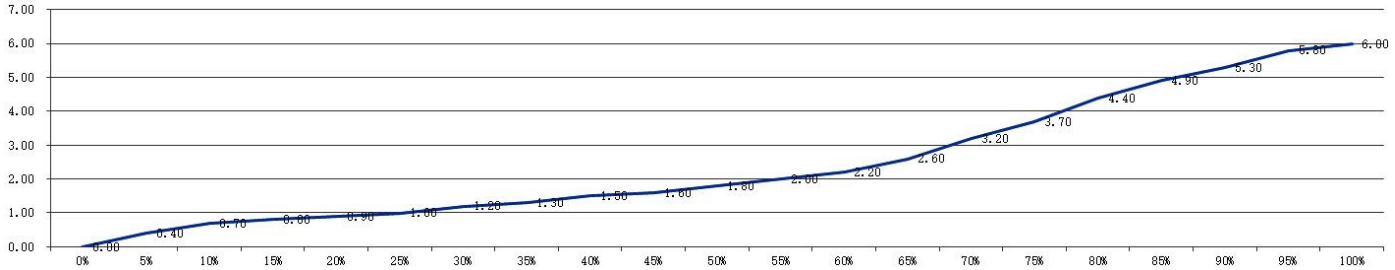
Turns	Kvs					
	DN15	DN20	DN25	DN32	DN40	DN50
0.2	0.2	0.2	0.4	0.2	1.5	1.6
0.4	0.4	0.4	0.7	0.4	2.3	3.1
0.6	0.6	0.6	0.8	1.1	3.2	4
0.8	0.7	1	0.9	1.4	3.9	5
1	0.9	1.1	1	1.6	4.4	5.8
1.2	1	1.2	1.2	1.8	5.1	6.4
1.4	1.1	1.3	1.3	2	5.5	7
1.6	1.2	1.4	1.5	2.2	6.2	7.9
1.8	1.3	1.5	1.6	2.5	7	9
2	1.4	1.6	1.8	2.6	7.8	10.1
2.2	1.5	1.7	2	2.9	9.2	11.5
2.4	1.7	1.8	2.2	3	10.6	12.9
2.6	1.9	2	2.6	3.5	12.1	14.6
2.8	2.4	2.2	3.2	4.1	12.8	16.4
3	2.5	2.5	3.7	4.8	13.8	18.6
3.2	2.8	3.2	4.4	5.8	15.1	20.6
3.4	3.2	3.5	4.9	6.7	16.1	22.4
3.6	3.3	3.8	5.3	7.7	17.1	24.2
3.8	3.4	4.1	5.8	8.6	18.1	26.5
4	3.5	4.3	6	9.5	18.9	28.4



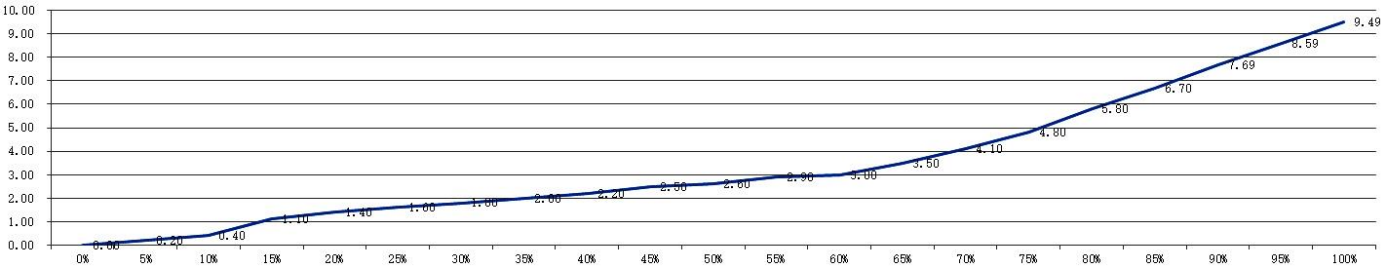
DN 15mm



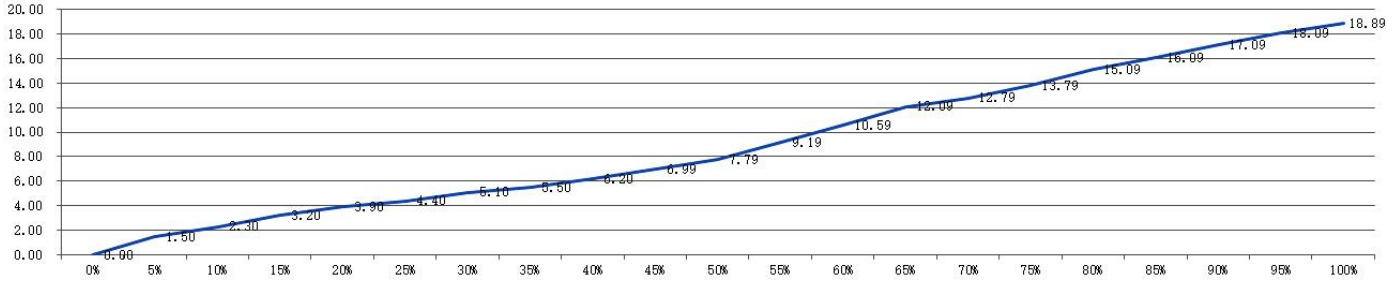
DN 20mm



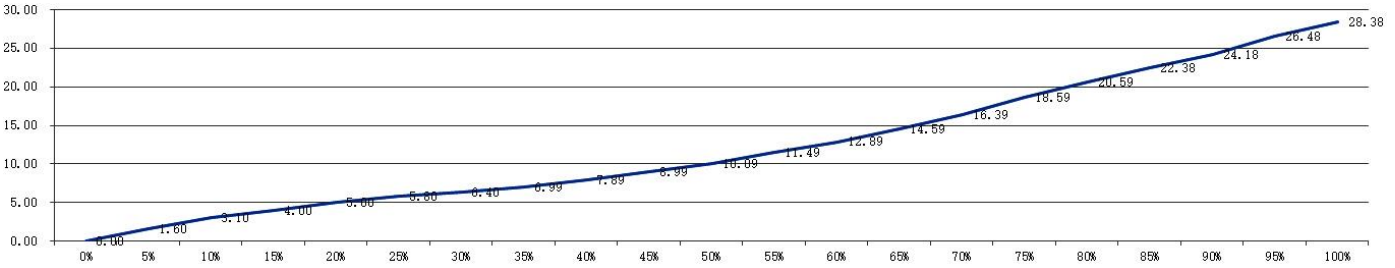
DN 25mm



DN 32mm



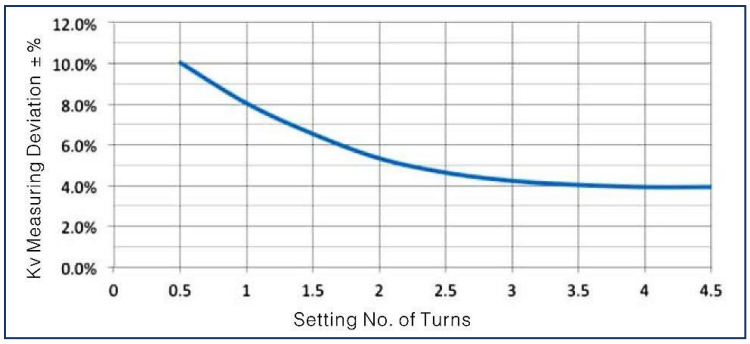
DN 40mm



DN 50mm

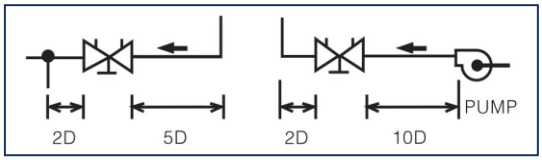
Measuring Accuracy:

According to GB/T 28636-2012 standard, when the valve's opening rate is greater than 50%, the deviation is lower than ±5%, Based on this, it is suggested to choose a valve with at least 50% opening rate when working under the design flow, Additionally, in order to ensure adequate on-site commissioning allowance, it is recommended to set the valve at around 75% opening rate



Installation :

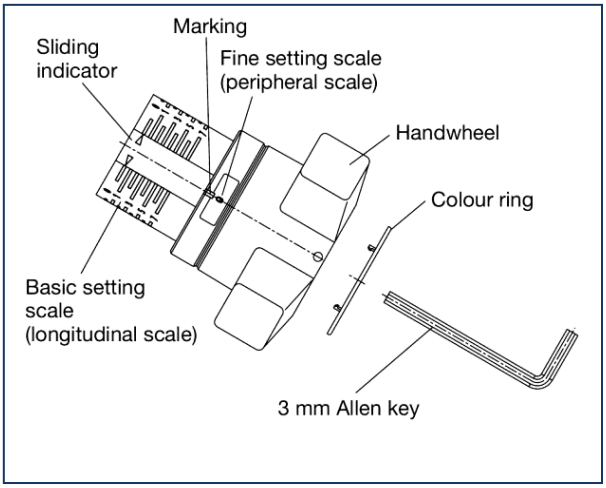
People should ensure that there is no debris in the system before installation, Please note that static balancing double regulating valve with flowing arrow point in the direction of the flow. The Static Balancing Double Regulating Valve is usually installed on return pipe. When combined with Differential pressure Balancing Valve. It can be used for supply pipe.



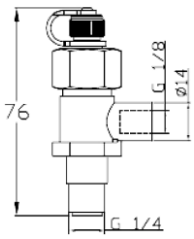
Generally, when connected to an elbow or a pump, the valve must keep a certain distance from the elbow or the pump. The rule is shown in the right figure. When connection to a bend or pump. It is necessary to maintain a certain length of straight pipe, when connection with elbow, follow valve 5d, rear 2d principle: Follow the 10d principle when connection with a pump.

Presetting DN 65 – DN 150:

- The value of presetting of the valve is set by turning the hand wheel.
  - The display of the basic setting is shown by the longitudinal scale together with the sliding indicator. Each turn of the hand wheel is represented by a line on the longitudinal scale.
  - The display of the fine setting is shown by the peripheral scale on the hand wheel together with the marking.
  - The subdivisions of the peripheral scale correspond to 1/10th of a turn of the hand wheel.
- The set value of presetting can be limited 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.

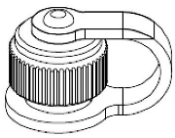


Attachment



Testing Point with shut – off function
With two testing points and shut – off function

Specification	Model
	LIV-CYK-001R



Seal Capping

Specification	Model
Red	LIV-CYK-003R
Blue	LIV-CYK-003B

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