

Series STBV-WM-LF

Lead Free Static Balancing Valve

Size: DN15-DN50

The Series STBV-WM-LF static balancing valves are designed for flow balancing in cooling, heating or process water systems. Its measuring points enable convenient system troubleshooting. The valve features Lead Free construction to comply with Lead Free installation requirements. This product meets the lead-free requirements of NCC volume 3.



Features

- Accurate flow control
- Numerical indicator of opening degree on the hand wheel
- Lockable set position
- Shut-off function for troubleshooting or maintenance
- Self-sealing measuring points to protect against leakage
- Nonrising-stem
- 'Lead Free' brass body construction

Pressure-Temperature

- Nominal Pressure: PN25
- Temperature Range: -10°C~120°C

Test Pressures

Pneumatic	Hydraulic
Shell: 6 bar(600kPa)	Shell: 37.5 bar(3750kPa)

Material

No.	Component	Material
1	Body	'Lead Free' Brass
2	Core	'Lead Free' Brass
3	Valve Base Sealing	PTFE
4	Bonnet	'Lead Free' Brass
5	Stem	'Lead Free' Brass
6	Core Rod	'Lead Free' Brass
7	Hand wheel	ABS Plastic
8	Shaft Sealing	EPDM O-ring
9	Measuring Orifices	'Lead Free' Brass

Product Model

Code	Size	Kvs (Total Valve)	Kvs (Fixed Orifice)
STBV-015-WM-LF	DN15	2.6	3.3
STBV-020-WM-LF	DN20	4.7	6.9
STBV-025-WM-LF	DN25	7.0	10.9
STBV-032-WM-LF	DN32	12.2	21.6
STBV-040-WM-LF	DN40	17.9	29.0
STBV-050-WM-LF	DN50	28.0	49.0

Kvs

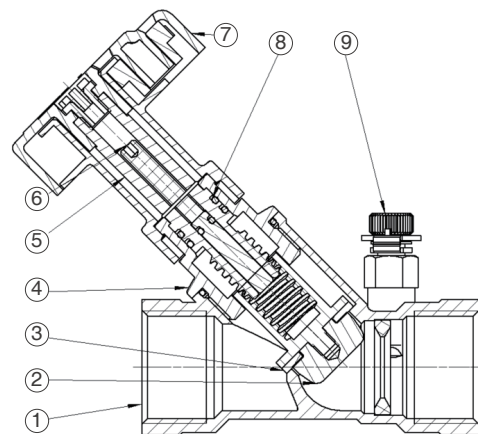
Turns	DN15	DN20	DN25	DN32	DN40	DN50
0.5	1.17	0.75	1.42	1.85	2.59	3.20
1	1.18	1.07	1.84	2.72	3.62	5.05
1.5	1.40	1.42	2.39	4.28	5.92	8.25
2	1.90	2.07	3.12	5.53	7.84	11.14
2.5	2.10	2.41	3.78	6.58	9.42	14.02
3	2.20	3.21	4.98	8.06	11.66	17.66
3.5	2.51	3.78	5.67	9.35	14.06	21.20
4	2.81	4.23	6.06	11.18	16.09	25.21
4.5	2.66	4.75	7.01	12.22	17.87	27.84

Specification

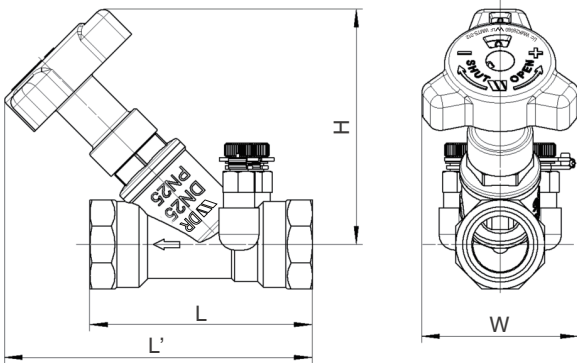
- Connection Standard: ISO 7-1
- Working Medium: Non corrosive liquids

Approval

- WaterMark No. : WMK26060

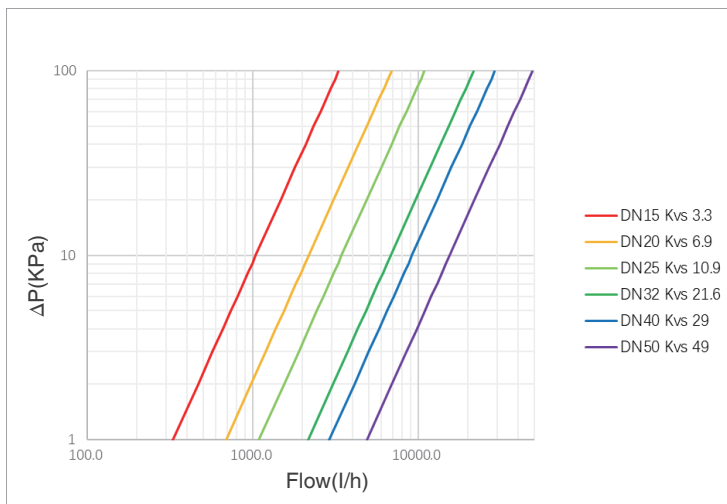


Installation Dimensions



Size	L(mm)	L'(mm)	H(mm)	W(mm)	Weight(Kg)
DN15	85	133	103.5	70.3	0.49
DN20	85	133	103.5	70.3	0.54
DN25	100	141	107.5	70.3	0.71
DN32	115	154	116.0	70.3	0.97
DN40	120	157	120.0	70.3	1.23
DN50	140	174	131.0	70.3	1.70

Characteristic Curves



Measuring:

The flow through STBV-WM-LF valve can be measured by measuring instruments. the instruments are using this formula :

$$Q = Kvs \cdot \sqrt{\Delta p}$$

Kvs is fixed orifice flow coefficient

Δp is measured across the measuring orifices

Installation Instructions

The static balancing valve is normally installed on the return pipe, When it is used with the differential pressure balancing valve valve, the static balancing valve is installed on the supply pipe.

When it is connected with elbow, a minimum of 5 pipe diameters of straight pipe upstream, a minimum of 2 pipe diameters of straight pipe downstream are required.

When it is connected with pump, a minimum of 10 pipe diameters of straight pipe upstream, a minimum of 2 pipe diameters of straight pipe downstream are required.

