



VALVES MANUFACTURER

مصنع صمامات بارق للصناعة

BRONZE STATIC BALANCING VALVE WAZEN-90

FIXED VENTURI / LOCKABLE MEMORY



SYSTEM APPLICATIONS

Air-conditioning systems
Chilled & hot water circuits
Hydronic heating systems
Potable water networks

WRAS

APPROVED PRODUCT

Approval No. 241108020

PN25

PRESSURE RATING

DN15-DN50

SIZE RANGE

BRONZE

BODY MATERIAL

PRECISION HYDRONIC BALANCING

BARIQ WAZEN-90 combines flow regulation, shut-off and differential-pressure flow measurement for hydronic systems. Suitable for water and ethylene glycol solutions, its fixed Venturi and lockable memory setting enable repeatable balancing and return to the preset position after shut-off.

FIXED VENTURI

Integrated measuring element, separate from the regulating disc, for differential-pressure flow measurement.

NUMERICAL SETTING INDICATOR

Two-window readout displays whole and fractional turns for clear, repeatable setting.

SELF-SEALING TEST PORTS

Red and blue measuring ports automatically reseal when the measuring needle is withdrawn.

LOCKABLE MEMORY SETTING

Internal setting lock retains the balanced position. Supplied with a 3 mm Allen key.

COMPATIBLE MEDIA

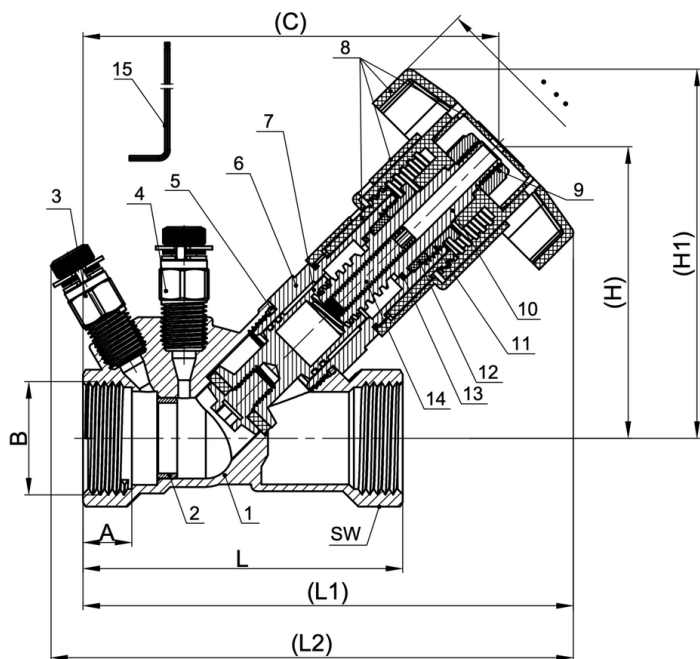
Water and ethylene glycol solutions

CONSTRUCTION & MATERIALS

STATIC BALANCING VALVE

WAZEN-90

ASSEMBLY / MATERIALS / DIMENSIONS



NO.	COMPONENT	MATERIAL
1	Body	C83600 / CC491K
2	Fixed Venturi insert	DZR CZ132
3	Self-sealing P/T valve - red	DZR CZ132
4	Self-sealing P/T valve - blue	DZR CZ132
5	O-ring	EPDM (HA70)
6	Bonnet	DZR CZ132
7	Regulating / shut-off disc	CZ132 + EPDM
8	Handwheel + indicator	PA6 + 30% GF
9	Nut	SS304
10	Stem	DZR CZ132
11	Packing nut	C38000
12	Packing	PTFE
13	Washer	PTFE
14	Memory / locking screw	SS304
15	Allen key (3 mm)	35# steel

Quantity: 1 of each component per valve

DIMENSIONS

Dimensions in mm

DN	L	L1	A	B (thread)	H	C	H1	SW	L2
15	72.5	128.78	12.5	Rc1/2-14	79.71	106.55	101.78	27	143.3
20	82	137.78	12.5	Rc3/4-14	84.84	115.92	107.28	32	148.1
25	95	145.73	14.5	Rc1-11	87.63	123.59	109.78	40	156.2
32	115	160.85	16.5	Rc1 1/4-11	99.66	138.7	121.82	48	148.1
40	135	179.18	19	Rc1 1/2-11	108.34	157.02	130.49	56	163.5
50	150	190.18	19.5	Rc2-11	118.34	168.02	140.49	68.5	175.4

FLOW MEASUREMENT STATIC BALANCING VALVE WAZEN-90

FIXED VENTURI / SELF-SEALING TEST PORTS

01 | FIXED VENTURI MEASURING ARRANGEMENT

CONNECT

Red and blue P/T ports connect to a differential-pressure measuring instrument.

MEASURE

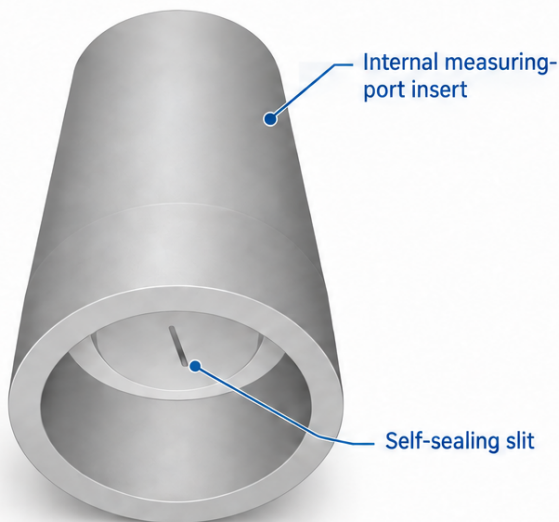
The fixed Venturi provides the measuring section. Flow is determined using differential pressure and calibration data.

REGULATE

A separate moving disc adjusts the flow while the Venturi measuring insert remains fixed.

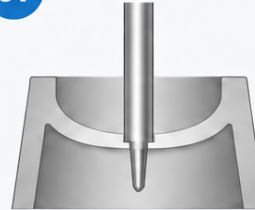
02 | SELF-SEALING MEASURING PORTS

INTERNAL INSERT DETAIL



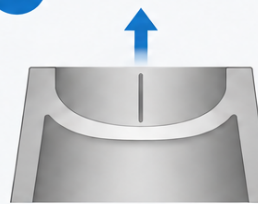
FUNCTIONAL SCHEMATIC

01 MEASURING NEEDLE INSERTED



Measurement access through the sealing insert.

02 NEEDLE WITHDRAWN



The insert closes automatically after needle withdrawal.

Both ports automatically reseal when the measuring needle is withdrawn.

03 | INTEGRAL FLOW-SMOOTHING FINS



INTEGRAL BODY CONSTRUCTION

The flow-smoothing fins form part of the valve body and are positioned downstream of the valve seat.

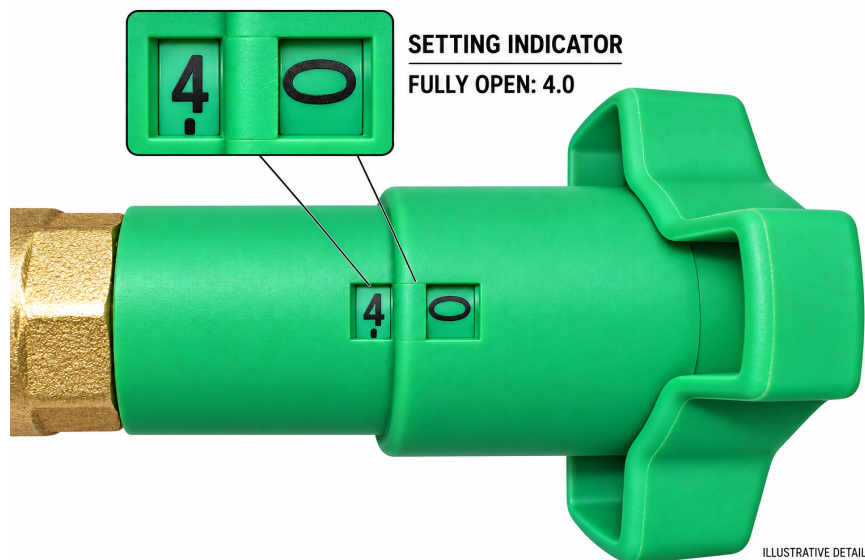
GUIDED DISCHARGE FLOW

The fins guide flow through the outlet passage, complementing the separate fixed Venturi measuring arrangement.

SETTING & MEMORY STATIC BALANCING VALVE WAZEN-90

NUMERICAL INDICATION / LOCKABLE SETTING

01 | CLEAR, REPEATABLE SETTING



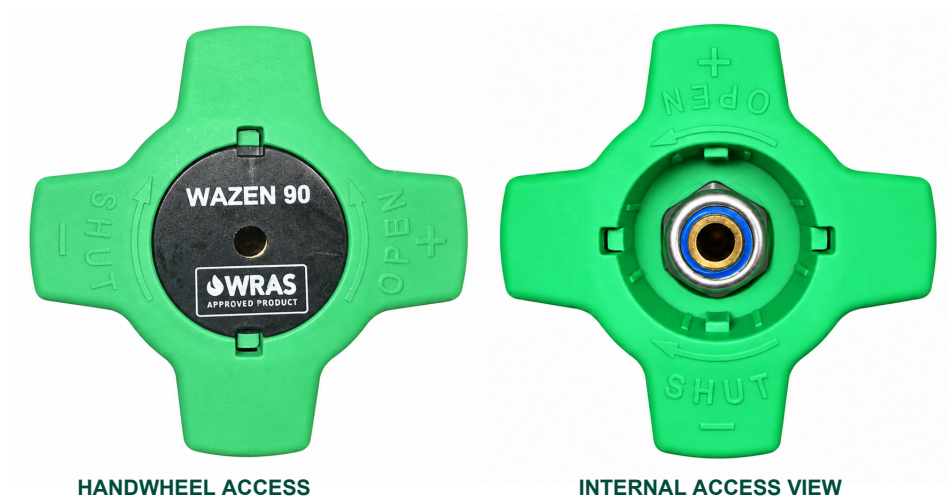
TWO-WINDOW INDICATOR

Whole-turn and fractional-turn readouts make the balancing position easy to read, record and reproduce.

RETAINED BALANCE

The internal memory stop retains the selected opening, allowing shut-off and return to the balanced setting.

02 | CENTRAL ACCESS TO THE MEMORY LOCK



3 mm ALLEN KEY

Insert through the central handwheel opening to secure the internal setting screw.

03 | SET ONCE. RETURN TO THE SAME POSITION.

01 SET

Select the required balancing position, e.g. 2.0.

02 SECURE

Use the Allen key to secure the internal memory stop.

03 CLOSE

Close the valve fully when shut-off is required.

04 REOPEN

Open to the retained 2.0 stop without readjustment.

TECHNICAL SPECIFICATIONS

STATIC BALANCING VALVE

WAZEN-90

OPERATING DATA / CONNECTIONS / STANDARDS

PN25

NOMINAL PRESSURE

DN15-DN50

NOMINAL SIZE RANGE

-20 TO +120 C

TEMPERATURE RANGE

01 | OPERATING DATA & CONNECTIONS

Pressure rating	PN25 / 2.5 MPa
Nominal sizes	DN15-DN50 (1/2-2 in)
Working temperature	-20°C to +120°C
Working media	Water and ethylene glycol mixtures
Valve end connections	Female threaded
Standard thread	BSPP
Optional threads	BSPT, Rp or NPT
P/T port connection	1/4 in female thread

02 | MANUFACTURING & TESTING STANDARDS

Body material standards	ASTM B584 (C83600) / EN 1982 (CC491K)
Valve design	BS 5154
Pressure testing	BS EN 12266-1 and BS EN 12266-2
Shell strength	BS EN 12516
Quality management	ISO 9001 certified manufacturing

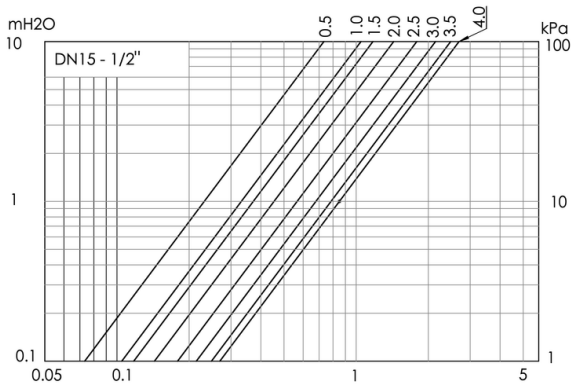
SERVICEABLE CONSTRUCTION

Removable handwheel and bonnet allow servicing without removing the valve body from the pipeline.

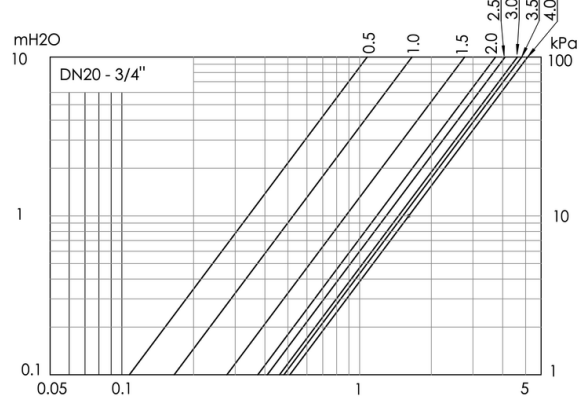
HYDRAULIC PERFORMANCE STATIC BALANCING VALVE WAZEN-90

FLOW CHARACTERISTICS / DN15-DN50

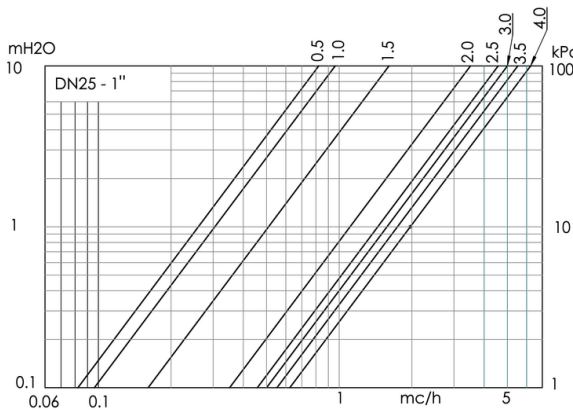
DN15



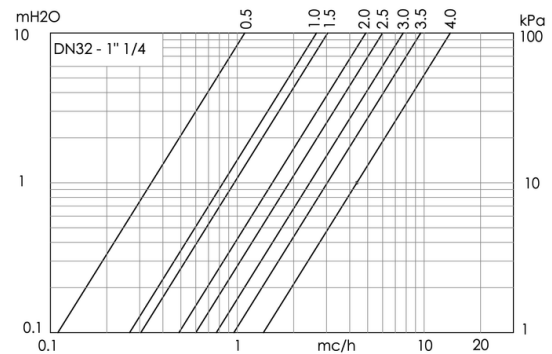
DN20



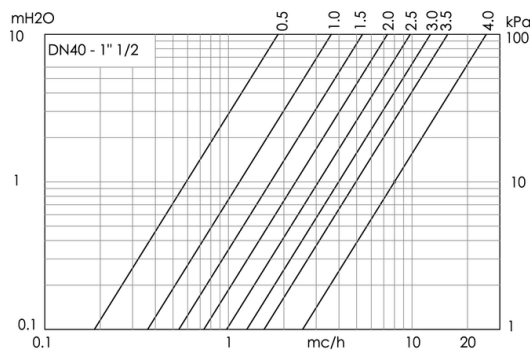
DN25



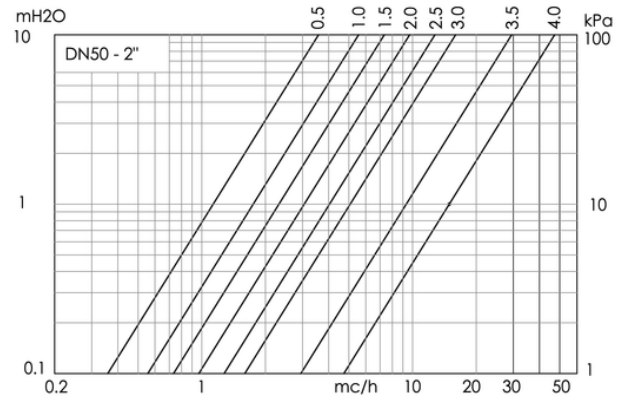
DN32



DN40



DN50



ONLINE VALVE SELECTION

Scan to access the BARIQ flow selection tool.

bariigroup.com/software-selection/