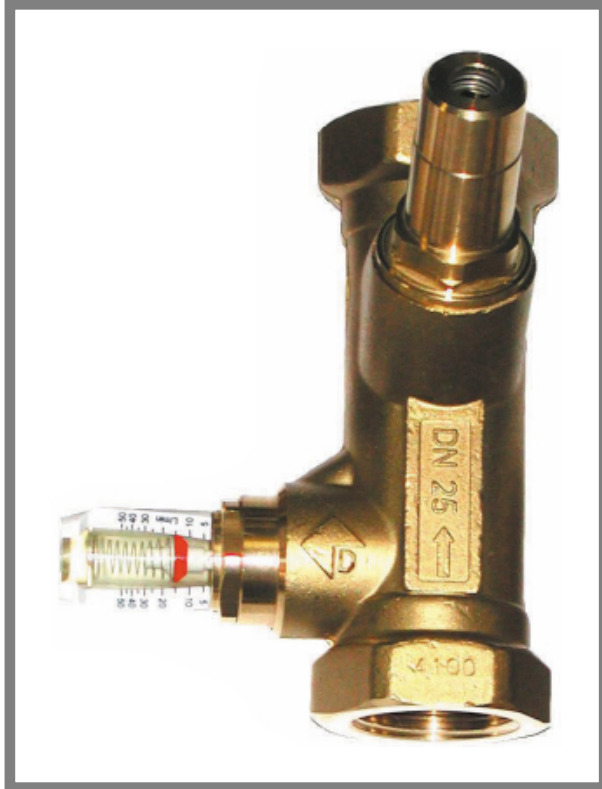


## WattFlow Balancing Valve

# AXIO



### FEATURES

- Multi-turn valve assembly for accurate balancing of flow
- Low noise transmission
- Constant visual indication of actual flow rate
- No calculation or additional equipment required to set flow rate
- Works in any position
- Tamperproof locking facility
- Low pressure drops

### FUNCTION

Incorporated into each valve is an integrated flowmeter, which constantly measures the actual flow rate passing through the valve.

As the flowmeter is set at a 90° angle to the valve body, reading of the flow rate is always possible, even when the valve is fully insulated.

The flowmeter scale can be fully rotated to facilitate easy reading in any position.

As the system medium does not constantly pass through the flowmeter, it is protected from ingress of debris, facilitating easy reading of the flow rate at all times.

By rotating the multi-turn valve adjustment spindle, the flow is visible in L/min on the flowmeter, allowing the flow to be accurately set against the design characteristics of the circuit with minimum effort.

WattFlow balancing valves are indifferent to the flow profile on the inlet; therefore, under normal operation, a straight piece of pipe the same diameter and length as the valve housing is sufficient.

Depending on the installation, this may not be necessary when installing DN15/20 valves.

### APPLICATION

Incorrect circuit flow rates are one of the most frequent reasons for the poor performance of HVCA installations.

WattFlow balancing valves are used to set the correct flow rate through all heating and cooling circuits where water is the medium being used.

WattFlow balancing valves offer the installer the advantage of accurate system balancing without the need to resort to tables or complicated balancing equipment.

### SPECIFICATION

Max. operating temp.	see pressure/temp. diagram
Min. operating temp*	-20°C
Max. operating pressure	see pressure/temp. diagram
Accuracy of flowmeter	+/-10% of actual reading
Nominal size	DN
Housing and Interior	Brass MS58
Flowmeter	High-quality, impact resisting and temperature stable plastics
Spring	Stainless steel
O-Ring seals	EPDM elastomers

\*When using appropriate antifreezing compounds

## Dimensions

DN	A	B	C	E	SW(X)	F	SW (Y)	SW(Z)
				Male thread (ISO 228/1)		Female thread (ISO 7/1)		
15	86	37	68	1"	37	-	-	4
20	86	37	68	1"	37	-	-	4
25	120	69	73	1 1/4"	46	1"	42.5	6
32	135	77	77	1 1/4"	52	1 1/4"	49	6
40	153	80	80	2"	-	1 1/4"	61	6
50	176	90	85	2 1/4"	-	2"	70	6

## Dimensions

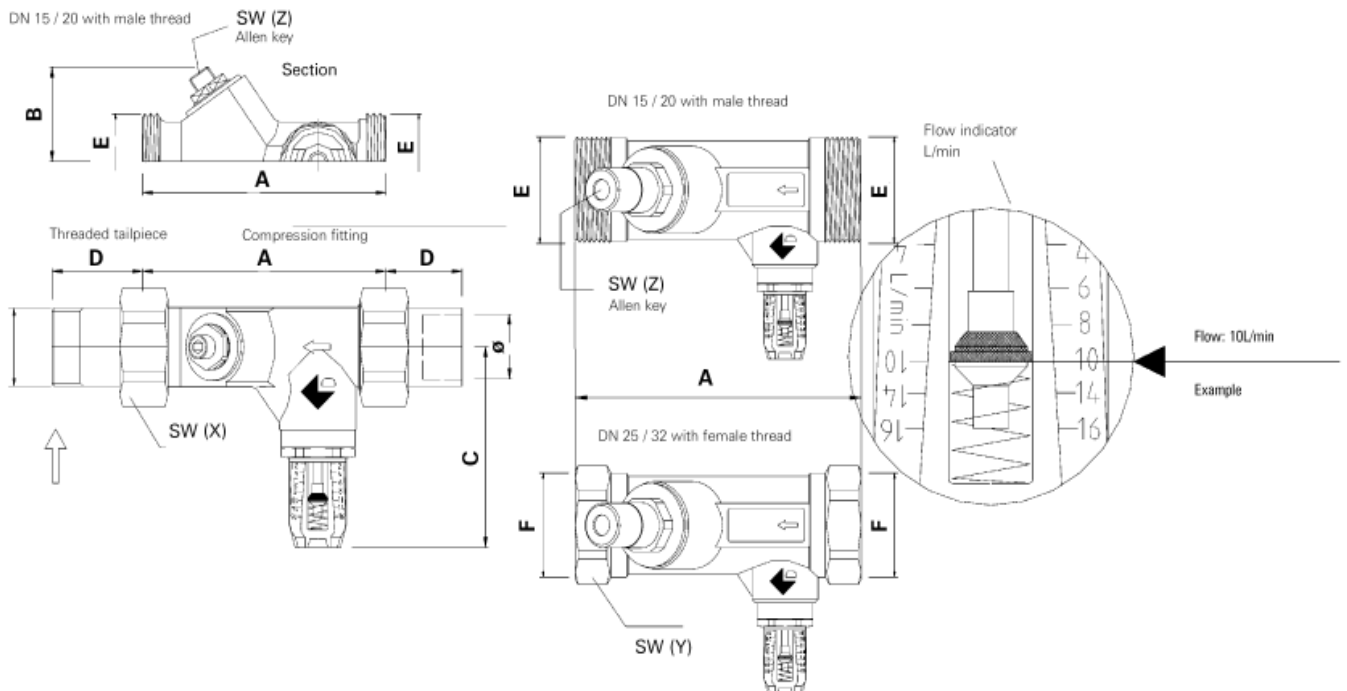
DN	A	B	C	E	SW(X)	SW(Z)
15	86	37	68	M28 x 1.5	32	4
20	86	37	68	M28 x 1.5	32	4

## Dimension "D" of the Fittings

Flat sealed: Union nut, gasket, threaded tailpiece, soldering or welding socket.  
 Compression fitting: Union nut and biconical clamping ring.

WattFlow - DN tailpiece Diameter tube mm	15 / 20				25			32		
	R 1/2"	R 3/4"	R 1"	R 1"	R 3/4"	R 1"	R 1"	R 1"	R 1/4"	
	15	18	22	28	18	22	28	22	28	35
Threaded tailpiece	30		32	35	30	37		35	46	
Soldering socket	19	19	19	34	19	19	22	19	22	22
Welding socket	on request				on request			on request		
Compression fitting	9									

R = Male thread



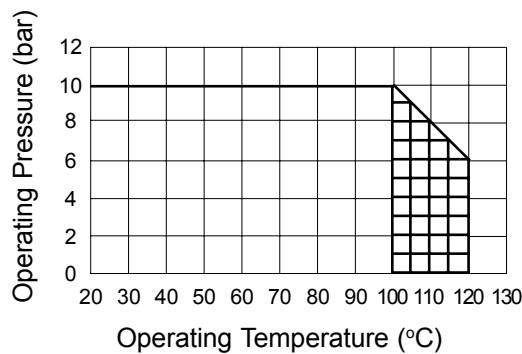
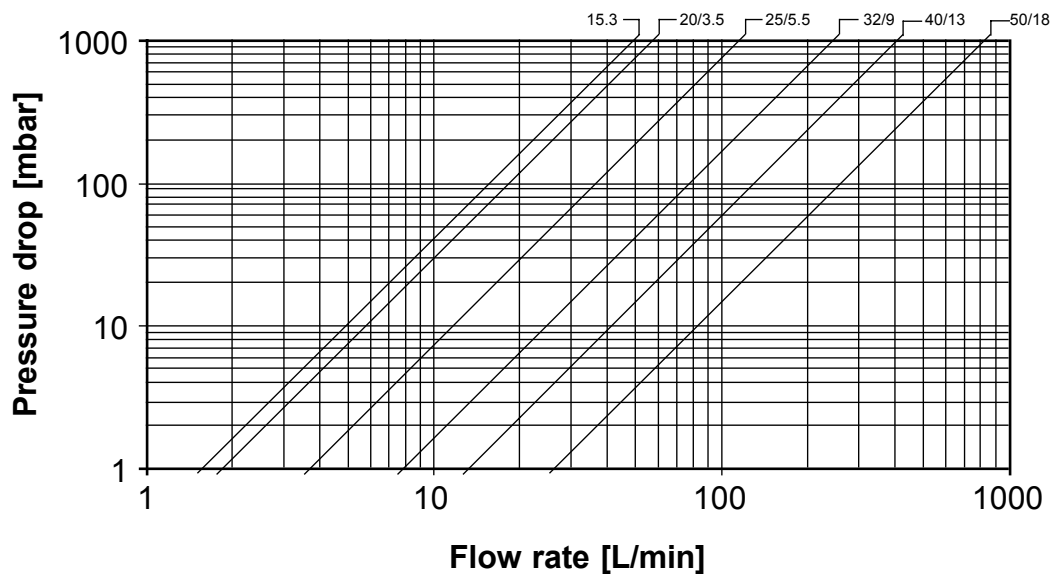
A full range of accessories is available, please contact for further details.

## Available Types

IG = Inside Thread ISO 228/1 AG = Outside Thread ISO 228/1

Reference No.	Dimension	Thread	Flow Indicator	Kvs	Weight
AXI-349 82 85	DN15	22mm or 15mm Copper	0.5 - 7 L/min	1.5	0.6kg
AXI-349 82 90	DN15	22mm or 15mm Copper	2 - 16 L/min	3.0	0.6kg
AXI-349 82 95	DN20	22mm or 15mm Copper	4 - 36 L/min	3.5	0.6kg
AXI-349 83 00	DN15	1" AG	0.5 - 7 L/min	1.5	0.46kg
AXI-349 83 05	DN15	1" AG	2 - 16 L/min	3.0	0.46kg
AXI-349 83 10	DN20	1" AG	4 - 36 L/min	3.5	0.46kg
AXI-349 83 55	DN25	1" IG	5 - 50 L/min	5.5	0.93kg
AXI-349 83 60	DN32	1 1/4" IG	10 - 80 L/min	9.0	1.25kg
AXI-349 83 65	DN40	1 1/2" IG	15 - 120 L/min	14.0	1.75kg
AXI-349 83 70	DN50	2" IG	25 - 200 L/min	18.0	2.90kg
AXI-349 83 45	DN25	1 1/4" AG	5 - 50 L/min	5.5	0.94kg
AXI-349 83 50	DN32	1 1/2" AG	10 - 80 L/min	9.0	1.28kg
AXI-349 83 75	DN40	2" AG	15 - 120 L/min	14.0	1.75kg
AXI-349 83 80	DN50	2 1/4" AG	25 - 200 L/min	18.0	2.90kg

### Dimension DN/Kvs



Temperature range 100°C at 10 bar or 120°C at 6 bar

### Caution

Pressure and temperature should be kept within the boundaries as indicated.

Continuous operational temperatures exceeding 100°C should be avoided.

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