

ENGINEERING
TOMORROW

Danfoss

Danfoss Dynamic Valve™

The simple solution to efficient heating

Optimal temperature control and automatic hydronic balancing for two-pipe heating systems – all in a single valve.



80-90%
of multi-family
buildings

currently have inefficient
heating systems, wasting energy
and costing their tenants more
than they should need to pay.

dynamic.danfoss.com

Creating a perfectly balanced system

Unbalanced heating systems are a constant source of tenant complaints and costly maintenance. Noisy radiators, uneven heat distribution, excessive heating bills and energy waste are all consequences of inefficient and wasteful systems.

With the new *Dynamic Valve™*, Danfoss gives you the ability to simply and cost-effectively solve these issues while increasing tenant satisfaction.

Automatic hydronic balancing made simple

Combining a radiator thermostat and an automatic hydronic balancing valve in a single product offers you a new way to significantly increase the efficiency of two-pipe heating systems.

Both designers and installers will find the new *Dynamic Valve™* simple to work with. Installation and commissioning are achieved without noticeable inconvenience to your tenants. Once installed, the new valve ensures constant hydronic balancing, 24 hours a day, 365 days a year.

The valve permanently optimizes the heating system in terms of accurate room temperature control. It also provides automatic hydronic balancing during unexpected system resistance, changing occupant behavior or fluctuations in weather conditions. What's more, individual tenants are unable to disturb the system balance, resulting in fewer complaints and expensive service visits.



A specific solution to a specific need

Especially designed for two-pipe heating systems, the *Dynamic Valve™* fits well into new buildings. But it is particularly well-suited to renovation and retrofitting projects involving apartment buildings, schools, office buildings, nurseries and many other applications.

It features a built-in pressure controller that constantly adapts to changing system conditions and automatically limits the amount of water passing through it. Flow is set at the valve on a simple 1-7+N scale, corresponding to a range from 10-135 l/h.

Once installed on all radiators and correctly set, the valve automatically ensures permanent hydronic balancing throughout the heating system, with all its benefits.

Simplicity and effectiveness combined

The beauty of the new valve is that it offers all the advantages of automatic hydronic balancing and accurate temperature control, combined into a single valve.

As well as even heat distribution with faster start-up times, the valve ensures highly accurate individual room temperature control. Energy efficiency is increased and pump settings can easily be optimized. This results in increased comfort and reduces energy waste and costs.

Your benefits

- Fast, consistent and comfortable heating
- Increased efficiency and reduced costs
- Reliable and silent heating
- Minimal disturbance during renovation

The benefits of automatic balancing

Creating an automatic balanced heating system increases comfort by delivering even heat with faster start-up times and consistent temperatures. It also eliminates noise, increases energy efficiency and reduces costs.

Danfoss offers two possible solutions in automatic balancing; For apartment buildings with high pump heads the well-proven, riser-fitted, ASV solution is the best option. For buildings with a pump head capacity of up to 6 meters (60 kPa), the new radiator fitted *Dynamic Valve™* delivers the same benefits with a realistic payback time.

Both the new *Dynamic Valve™* and the existing ASV solution are part of the Danfoss Renovation+ concept for renovations or retro-fitting in existing multi-family buildings.



Want to learn more about solutions for automatic balancing?
twopipesolutions.danfoss.com

Choosing the correct sensor for your project

The *Dynamic Valve™* is available in the most commonly used DN 10 and DN 15 sizes in both angled and straight configurations. With a flow range of 10–135 l/h, it is compatible with the majority of radiator design flows.

Because the valve uses the well-known RA sensor connection, there is a wide range of sensors to choose from. Your individual project requirements will determine the best choice:



RA 2000

For optimum temperature control, choose RA 2000 gas-filled sensors.



RAE / RAW

When price is important, liquid-filled Danfoss RAE or RAW sensors offer an excellent alternative.

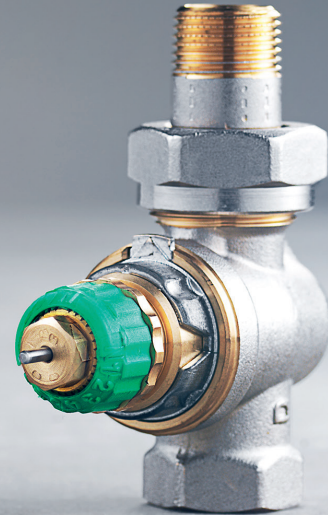


RA 2920

For public buildings or other 'heavy-duty' situations the tamper proof sensor provides a robust solution.

2.200 units tested

in 17 different heating
systems throughout 6
countries.



A proven solution

Although this is a new product, we already have a great deal of evidence of its operational effectiveness and reliability. During the product development process, we conducted field trials involving the installation of 2,200 units.

The test results we gathered during this process represent the most comprehensive pre-launch testing we have ever carried out on a new valve.

Experience the new
Dynamic Valve™ for yourself

To find out more about the new *Dynamic Valve™*, speak to your installer, your usual Danfoss contact, or visit our website.

The future of automatic hydronic balancing is here – find out more today.

dynamic.danfoss.com

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