

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.

# 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 *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 enables you to significantly increase the efficiency of two-pipe heating systems.

Both designers and installers will find *Dynamic Valve™* simple to work with. Installation and commissioning are achieved without noticeable inconvenience to your tenants. Once installed, the 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 costly service visits.



# A specific solution to a specific need

Especially designed for two-pipe heating systems, *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 volume of water passing through it. Flow is set at the valve on a simple 1-7+N scale, corresponding to a range from 25-135 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 *Dynamic 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 automatically 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 radiator-mounted *Dynamic Valve™* delivers the same benefits with a realistic payback time.

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

Find out more about our automatic balancing solutions:  
[twopipesolutions.danfoss.com](http://twopipesolutions.danfoss.com)



## Choosing the correct sensor for your project

*Dynamic Valve™* is available in all the most commonly used sizes and configurations. With a flow range of 25–135 l/h, it is compatible with the majority of radiator design flows.

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



### RAW

When price is important, liquid-filled Danfoss RAW sensors offer an excellent performance.



### RA 2920

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



### Danfoss Eco™ / Danfoss Link™ Connect

The stand-alone Eco™ or wireless Connect programmable thermostats can be used to increase energy savings.

EN 215  
certified

*Dynamic Valve*<sup>™</sup>  
was the first of its  
kind to achieve  
EN 215 approval.



# A proven solution

Although *Dynamic Valve*<sup>™</sup> is a recent product, we already have a great deal of evidence of its practical effectiveness and reliability via the many heating systems it has been installed in so far.

The valve's innovative technical construction solves or prevents noise and uneven heat distribution issues in a simple way and to the full satisfaction of users.

Experience *Dynamic Valve*<sup>™</sup>  
for yourself

To find out more about *Dynamic Valve*<sup>™</sup>, 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](http://dynamic.danfoss.com)

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