

Saving energy without turbulence

The new diaphragm valve from GF Piping Systems delivers energy savings of up to 50 percent

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Companies like Georg Fischer constantly demonstrate their technology leadership with customer-driven developments that deliver genuine benefits. GF Piping Systems now presents an innovative diaphragm valve that is exciting not only for its many ingenious ideas but also for its energy-saving features.



For the developers at Georg Fischer, customer needs are all-important: What is the best way of meeting customer requirements? How do customers benefit from Georg Fischer's interdisciplinary technology know-how? And what trends will be crucial for customers in future? The new generation of diaphragm valves vividly illustrates how Georg Fischer puts itself in the customer's role, thinks along his lines and comes up with genuine innovations. Rainer Kech, Product Management Leader at GF Piping Systems, sums up this approach: "We developed a completely new valve concept and deliberately challenged all the facts and design details that until then had been regarded as self-evident. That was the only path to real innovation."

The result is a device that is striking for its robustness, user-friendliness and cost-effectiveness. The new diaphragm valves not only offer greater ease of use and more security, but they are also more efficient since the improved, turbulence-free contours of the valves' inner walls make it possible to double the flow rate.

Reducing operating costs

To put it differently: let's assume a typical piping system in which, say, 50 diaphragm valves are installed. The conventional-design valves alone consume about 50 611 kilowatt hours of electricity each year in the mathematical model. The new diaphragm valves use only 24 827 kilowatt hours in the same configuration—a saving of about 50 percent. That makes the new diaphragm valves far more economical, saves resources and reduces CO₂ emissions.

Moreover, experts appreciate the much lower pressure losses during operation. The new valves, furthermore, have a longer life because they are more resistant to corrosion and abrasion. Package all these features together and industrial customers in particular enjoy a big advantage when it comes to minimising operating costs.

Designed for all liquids

All in all, the instrumentation and control of media transport in piping systems is safer, simpler and more economical thanks to the new generation of diaphragm valves—regardless of the type of substance. These valves can handle any fluid, whether it is extremely contaminated or highly pure. The valve is used in a wide range of applications—from the chemical process industry to microelectronics and water treatment or cooling.

So it's no surprise that industrial customers have responded enthusiastically to the new-generation diaphragm valve. After all, every chance to boost efficiency is highly welcome in tough economic times.

The bottom line

Customised for daily industrial operation

“Georg Fischer has developed an entirely new valve technology that is designed to ensure liquid transport under the tough conditions of daily industrial operation. Security, efficiency, less energy expenditure—we put it all together.”

Rainer Kech, Product Management Leader, GF Piping Systems, Schaffhausen

New diaphragm valve

Safer, simpler, more efficient

A life-saver for hazardous substances

When regulating or metering hazardous substances, the new diaphragm valve is a real life-saver because it's the safest diaphragm valve ever. Uncompromising, maintenance-free security is ensured by a central, non-corrosive plastic union nut instead of the usual four metal screws.

Plug'n Play – a flick of the wrist does it

With the new diaphragm valve, a flick of the wrist is enough to increase flow or stop it altogether. In the standard version, the diaphragm valves are regulated manually by a lockable handwheel to protect the valve against accidental actuation. For fully automatic operation, the new valve family can be equipped with the DIASTAR pneumatic valve actuator.

Uncomplicated exchange

What makes these new-generation diaphragm valves particularly customer-friendly is the fact that their external and internal dimensions are identical with those of previous models. This means that all the new valves are backward compatible, so that an exchange in existing piping systems is uncomplicated.

Lower procurement costs

The optimised flow rates lead to much greater efficiency and cost-effectiveness. Energy expenditure is reduced, and pump performance can be scaled down, resulting in lower procurement costs.

GF Piping Systems

A step ahead in technology

A leader in plastics and metal ...

GF Piping Systems is one of three Corporate Groups of the Georg Fischer Corporation and a leading provider of plastic and metal piping systems.

... with a comprehensive product portfolio

The portfolio includes jointing technologies, fittings, mountings, sensors along with pipes for water treatment and distribution and for the safe transport of liquids and gases.

innovative ...

GF Piping Systems offers innovative, cutting-edge technology solutions in diverse segments: building technology, chemical process industry, food and beverages, microelectronics, ship-building, water and gas utilities and water treatment.

... and local around the world

Sales companies in more than 25 countries and representative offices in another 80 countries ensure customer service around the clock. Located close to the customers, production facilities in Europe, Asia and the USA meet local requirements.

“Adding Quality to People's Lives”

Lower energy expenditure saves resources

Needs-driven innovation culture at Georg Fischer

With its strong customer focus, Georg Fischer provides the ideal combination of technological progress and energy efficiency. The new diaphragm valve helps reduce both operating costs and energy consumption—customers and the environment reap the benefits.

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