





We conduct transparent problem-solving processes with our customers, thus establishing long-term business relationships | Balázs Janossy, Ph.D.

Beyond Standard is how we serve our customers. We provide full support from concept to production to performance in the field.

A Case study

A high-tech instrumentation start-up needed an on/off valve to control a small volume of gas in their measuring cell.

A dialogue with our sales team ensued; the request was assigned to Gevasol's experts in that field.

Consulting with the customer, we combined our expertise to improve the device while reducing development time and cost.

Once we keenly understood the application and the need, we customized a solution using our unique proportional valves and a regulator.

The result

Gevasol's solution replaced not only the on/off valves but has gone beyond the initial request to replace pressure regulators.

The instrument is now:

- More stable
- More precise
- Consumes less gas





Precision Miniature Proportional Valves for Gases up to 70 Bars

Gevasol has an extended range of precision proportional valves up to 70 bars.

- Sturdy construction and high-tech material allowed us to raise the pressure limit from 12 to 70 bars.
- Tiny flows limited by orifices of 0.1 to 0.5 mm allow gas injection up to 70 bars with an excellent, linear, controllable flow.
- A meager leakage rate of below 1ml/min.

This range offers more possibilities for **instrumentation**, **semiconductors**, and **biotech** applications.

Advantages

- Operate over a wide range of pressure
- High resolution with a stable, repeatable flow curve
- Small form factor
- Easy mounting in manifolds
- Low power consumption
- Low leakage
- Small dead volume

Instrumentation Valves



Media-separated Solenoid Valve

P107

- Function: 2/2NC
- Orifice: up to 4 mm
- Flow: kv up to 6.5 l/min
- Pressure: up to bar
- Vacuum: up to 8 bars



Miniature media separated valve **P408**

- Function: 2/2NC
- Orifice: 0.8 mm
- Pressure: 0 to 2 bars

Application: liquid dosing, sampling small dead volume and very little pumping



High Flow Proportional Valve for Gases

P447

- Flow: kv up to 4.5 l/min
- Pressure: 0 to 7 bar

Application: flow or pressure control



Miniature Flow Control Valves
P377CFR

- Function: closed loop proportional flow control
- Flow: from 50 ml/min to 30 l/min
- Inlet pressure range: up to 20 bar

Application: precision dosing of gases



Precision Proportional Valve

- Orifice size: 0.05 to 2 mm
- Pressure: up to 70 bars
- **Applications:** fluid and gas flow or pressure control



Compact High Flow Water Valve

P387

- Flow: kv = 15l/min
- Pressure: 1 to 4 bars
- Low power for battery

Applications: shut-off valve, sanitary



Positioner: Flow and Pressure Controller for Hydraulic Actuators

- <1% precision regulation up to 16 bars
- Up to 5 years maintenance-free operation on battery
- Data logging and transmission
- Battery powered (life time: 5 years)

Function:

Upstream, downstream pressure regulation, flow regulation, filling.

Applications:

■ Industrial valve control



Miniature Solenoid Valve for Liquid and Gases

P419

- Function: 2/2 NC or Latch
- Orifice: up to 2 mm

Application: Dosing, sampling, shut-off

Ettem Engineering

Sealing solutions for extreme and non-standard applications.

- In-house infrastructure for assembly, testing, and unique processes
- Design and build customized sealing solutions for OEM industrial applications

Advanced fluid film techniques of contact, near-contact, and non-contact for:

- Highly corrosive media applications
- Slurry solutions
- Fluid with high vapor pressure

The sealed-for-application product range includes:

- Catalog items
- Custom-engineered seals
- Complete rotary assemblies

Applications: Energy, chemical, pharma, defense, and petroleum.



Top Entry Drive Unit for a Bio-Reactor **DU00537**

- Speed: 300 RPM
- Pressure: up to 100 PSI^
- Temperature: up to 300°C
- Media: biological fluids

Applications: dual bio reactor.



Closed Cycle Gas Turbines Mechanical Seal **SL00306**

- Speed: up to 2500 RPM
- Process pressure: up 5 bar
- Temperature: up to 120°C
- Media: hydrocarbon vapor

Applications: organic power turbines.



FRU - Fluid Rotary Union for Radar Antenna

FRU00756004

- Speed: 35 RPM
- Process pressure: up to 180 PSI
- Temperature: -40°C to 60°C
- Media: coolant fluid

Applications: radar antennas and other applications that require high flow fluid.



Reliability Lab

The Gevasol Group operates a reliability lab in the Netherlands. Gert Kragten, PhD, who holds a green belt certification as a reliability engineer, is at the helm.

The lab performs reliability tests on Gevasol's products, including:

- lifetime testing
- failure analysis
- reliability simulation and calculation

The lab generates and maintains a life-database of test methods and results. This allows us to test similar products in the same way.

Comparing products performance from the field with the mechanisms found in the development phase improves the testing reliability—and the **reliability of Gevasol's products.**

Keep in touch!



Gert van Emmerik

After completing his technical education, Gert's first job was solving a production backlog of a Nutella-like product. Later he gained experience in various industrial sectors like metal, logistics, and agriculture. His primary focus has been working with customers to design custom solutions to their needs. "Working for the family-owned Gevasol Group is exciting," he says. "I love the company culture in which people make a difference. I love the challenge of working with innovative OEM manufacturers and providing them with reliable solutions. So they, in turn, can create distinctive advantages for their customers."

At a glance:

- Lives in Weesp, an old city 20 km south of Amsterdam
- Married to **Rosmarie**
- Father to three young men
- Hobbies: "As a Dutch guy, I love football and Austrian cakes!"

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Balázs Janossy, PhD

Dr. Janossy is a physicist and director of business development at Gevasol's Fluid Control Division. After several years as an academic, Balázs became the microtechnology scientific officer at the Lausanne Engineering School. From there, he proceeded to industry. Balázs specialized in automotive sensor development and fluid automation system developing electronic and sensor activities.

He has extensive fluid control experience and high sensors and actuators competencies.

At a Glance:

- Lives in Geneva, Switzerland
- Married
- Father of three
- Hobbies: Go on hikes

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Danny Cohen, MBA

Danny held management positions in the thermal imaging industry for twenty-nine years. He saw the technology evolving from military to civilian uses such as aviation, facility security, medicine, gas leaks, and more. In 2022, Danny accepted Ettem Engineering's CEO position.

'I feel privileged to join the Gevasol Group. I have heard a lot about the group and its good treatment of employees—a topic that is dear to my heart.'

At a glance:

- Lives in Israel in the Haifa metro area
- Married to Sigalit
- Father of **Dor** and **Roni**
- Hobbies: Gardening and constructing facilities for a smart home

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