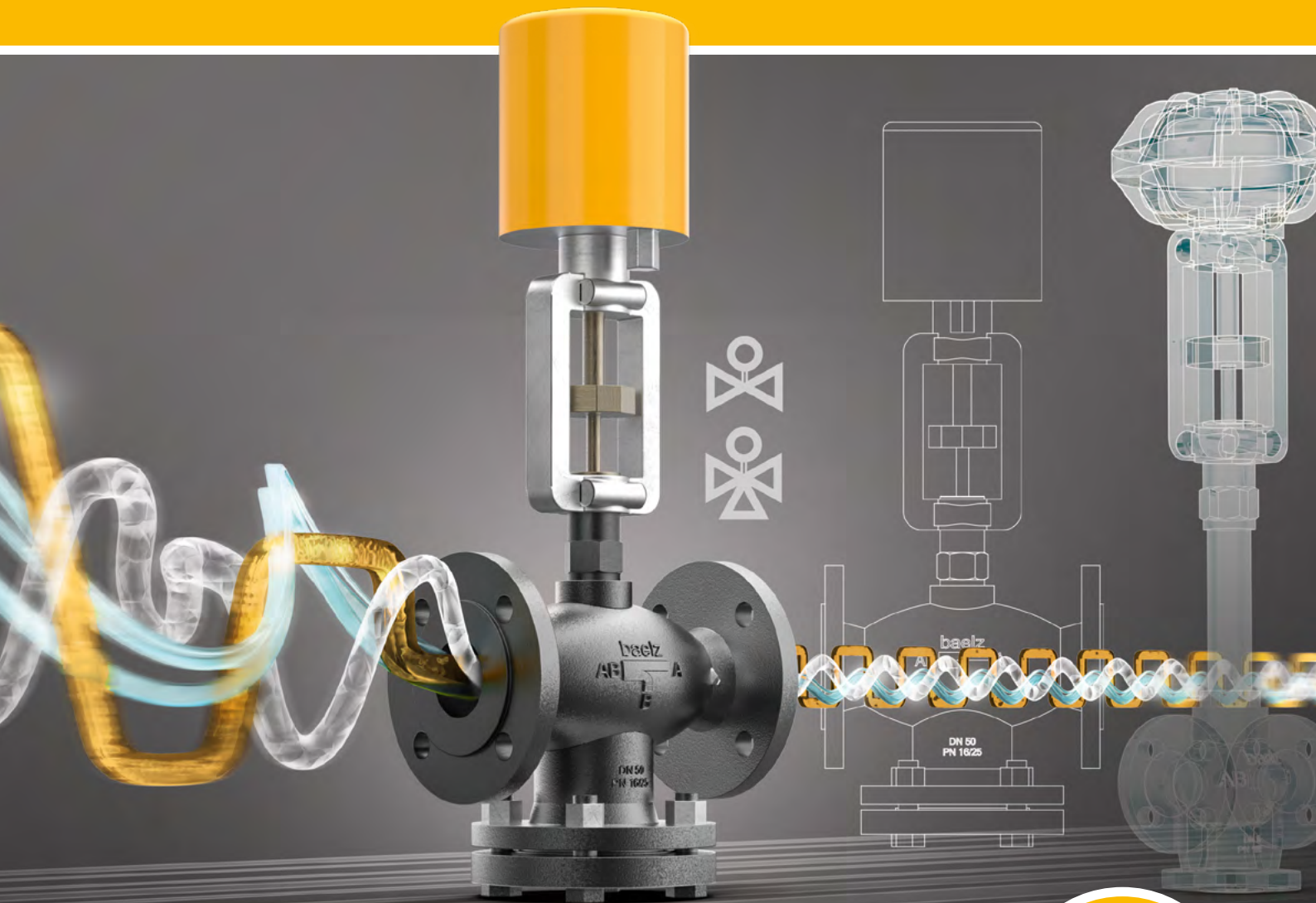




Control valves from Baelz



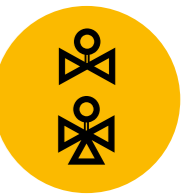
Applying system expertise for perfect energy-efficient control components



www.baelz.de



Modular valve series baelz 34X



Control valves for special applications

baelz 340-2 with baelz 373-E07
2-way control valve in ductile iron with electric actuator



baelz 340-2-VA with baelz 373-P21
Stainless steel 2-way control valve, here with polyester-coated version of the diaphragm actuator for hydraulic operation



baelz 342-2 with baelz 373-P21
3-way control valve in cast steel. Shown here with cooling tube, pneumatic actuator, I/P positioner and diaphragm pressure regulator



Flexible modular system

One valve body, many valves. Because we make 2 and 3-way valves and ejectors from a single body, we can offer our customers better availability and more attractive prices. Depending on the application and working medium, valve bodies are available in **spheroidal cast iron, cast steel and stainless steel.** Several types of valve plug, cooling tube and flange options as well as compatible actuators, controllers and accessories round off our range.



ANSI 300 - Baelz quality to American standards

Like all Baelz valves, these ANSI control valves are suitable for a wide range of applications, also at high temperatures. Areas of application include heating networks and power plants, industry and building technology as well as HVAC systems.

Technical data ANSI valves

- Medium:** Water/hot water, glycol (up to 50 %), Thermal oil, steam, other liquids
- Pressure:** ANSI 300
- Connection:** Flange ANSI B 16.5
- Nominal size:** DN 25 - 150 (1" - 6")
- Body:** Cast steel ASTM A216 WCB
- Temperature: without cooling tube:** -29°C to 232 °C
-20 °F to 450 °F
- with cooling tube:** -29°C to 343 °C
-20 °F to 650 °F



baelz 365 with baelz 373-E45
2-way control valve according to American ANSI/ASME standards. Shown here with cooling tube and electric actuator.

baelz 367 with baelz 373-P21
3-way control valve according to American ANSI/ASME standards. Here with cooling tube and pneumatic actuator.

Forged stainless steel 2-way control valves

Baelz 356 control valves are the ideal choice for demanding operating conditions, stringent hygienic requirements and where space is at a premium!



baelz 356 with baelz 373-E07

baelz 356 with baelz 373-P11 and baelz 87 I/P positioner

Technical Specifications baelz 356

- Medium:** Water/hot water, steam, thermal oil, gases
- Pressure:** PN 16/25/40
- Connection:** Flange DIN EN 1092-2 / 1092-1
- Nominal size:** DN 15 - 50
- Body:** forged stainless steel 1.4571
- Temperature: without cooling tube:** -10 °C to 240 °C
- with cooling tube:** -10 °C to 350 °C

The Baelz range of control valves

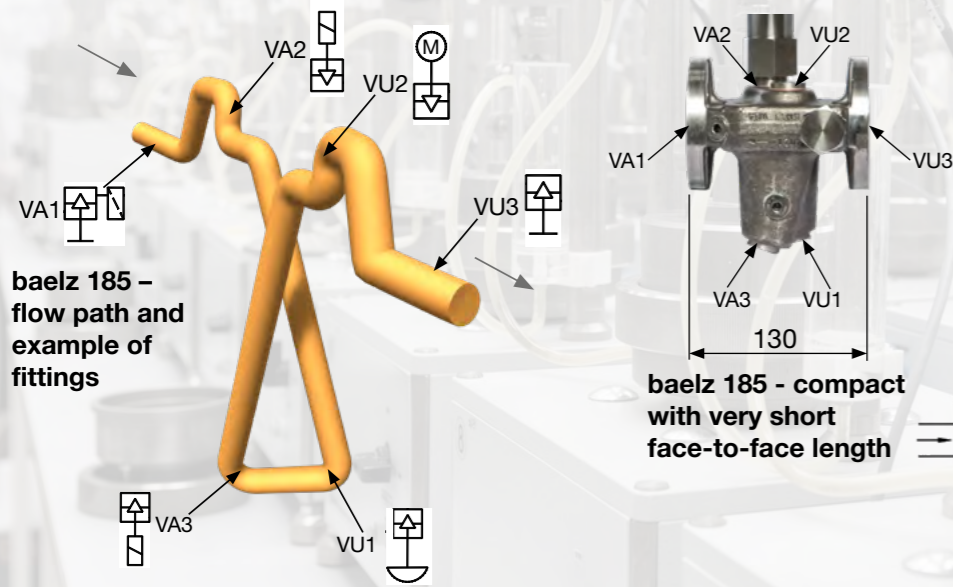
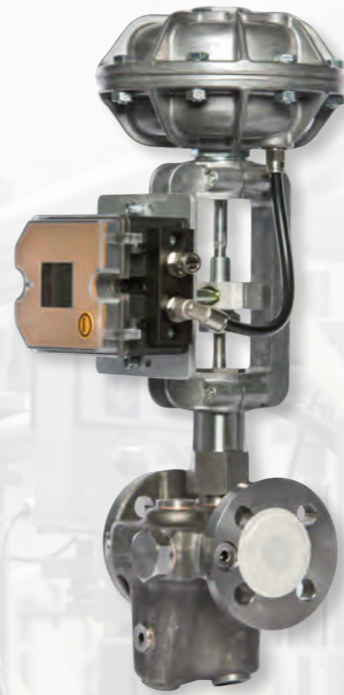
Types	2-way valves, 3-way valves, microflow valves, self-operated control valves
Materials	Spheroidal graphite cast iron 5.3103, cast steel 1.0619, various stainless steel grades
Nominal sizes	DN 15 to DN 300
Pressure ratings	PN 6 to PN 160
Temperatures	up to 350 °C - higher temperatures possible on request
Connections	Flanges according to DIN EN 1092-2, ANSI, optionally according to DIN EN 1092-1: male and female faces, female faces on all sides
Flow rates	several standard Kvs values per nominal size, special values available on request
Plug types	Plugs for different control behaviors, perforated plugs, Teflon plugs, balanced plugs
Medium	Water, steam, thermal oil, glycol, other liquids (including aggressive ones)
Further options	Special stroke lengths, tight-closing, silicone-free, non-ferrous metal-free, with heating





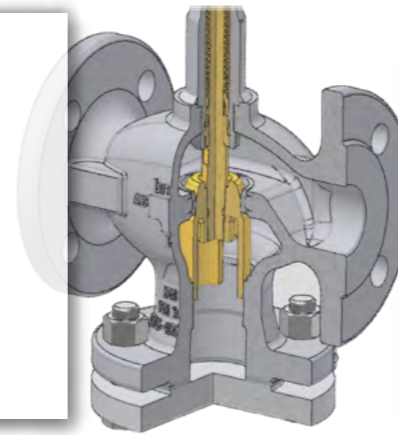
Stainless steel microflow control valve baelz 185 - versatile and compact

- **Compact design:** Small and with a short face-to-face length, the baelz 185 is ideal for confined spaces. Thanks to its multiple connection options, this stainless steel valve can be fitted with accessories such as actuators, sensors and control elements, for cleaning its integrated strainer for example.
- **Precise control, e.g. for laboratory applications:** The valve in DN 15 for low flow rates regulates very precisely thanks to a variety of available Kvs values, thereby saving energy.
- **Temperature and corrosion resistant:** The robust design made of forged stainless steel ensures many years of reliable operation, with condensate, for example, but also with aggressive chemicals. Available with cooling tube for operating temperatures up to 350 °C.



Bubble tight

Baelz control valves always have a leakage class better than IV according to DIN EN 60534-4. An optional **PTFE soft-sealing plug**, also known as a **Teflon plug**, even achieves a leakage class better than VI - the highest possible tightness level!



Hot stuff!

A **cooling tube** protects the actuator unit from high temperatures, which can improve service life and performance. The combination of **cooling tube and bellows** provides additional protection thanks to the safety stuffing box.



The advantages of a balanced valve

- **Lower actuating force:** The valve plug has a balancing surface that is exposed to the medium pressure. This surface compensates for the forces acting on the valve plug, which means that less force is required to open or close the valve.
- **Greater control accuracy:** Pressure compensation and minimization of the forces acting on the valve plug enable precise flow rate and pressure control.
- **Longer service life:** less mechanical stress on the valve plug and sealing surfaces, greater reliability in operation.
- **Energy efficiency:** The reduced actuating force and more precise control make for less energy consumption.



Balancing guide for baelz 340-EMF

Universal steam valve baelz 192

Control valve without auxiliary energy

Medium-controlled pressure reducing valve for steam. The control head can be equipped differently depending on the desired control variant. Control elements enable, for example, precise maintenance of steam pressure or a fail-safe function in the event of a power failure.



Reliable and cost-efficient

- **No additional energy source required:** The baelz 192 uses the pressure of the medium for control. No external energy is required.
- **Precise control:** Precise pressure control is particularly important for applications requiring constant pressure ratios.
- **Low maintenance:** Robust and reliable, the universal valve saves operating costs.
- **Fast response:** The baelz 192 reacts quickly to pressure changes, which increases the safety and efficiency of the system.
- **Safe:** Optional fail-safe function in case of power failure.

Noise reduction

A **perforated plug** counteracts noise and prevents wear due to cavitation. It replaces the parabolic plug and distributes the flow of the medium over multiple small orifices. In addition, flow is distributed more evenly, enabling greater control precision.



Perforated plug baelz 340

Perforated plate baelz 6250



A **perforated plate** protects the valve from damage due to excessive pressure loss and has a noise-reducing effect. This can be installed up or downstream of the valve. It regulates the pressure and flow velocity and absorbs the majority of the pressure loss. The perforated plate is thus "sacrificed" in order to extend the service life of the high-quality valve. Custom designed and manufactured for you by Baelz.





Electric actuators

Versatile
Available with positioner, fail-safe function, manual override, or built-in controller.
Baelz offers the perfect actuator for every valve.



Pneumatic actuators

Fast and precise
These flexible actuators with their fast response times can also be used in conjunction with an electropneumatic positioner for very precise control.



The Baelz actuator range

Actuator types	pneumatic linear actuators, electric linear and rotary actuators, manual actuation
Stroke lengths	6 mm to 66 mm
Actuating force	700 N to 30 kN
Actuating speed	Electric actuators: 1 mm/min to 130 mm/min Actuating time pneumatic actuators: < 1 s, depending on version
IP ratings	IP 42 to IP 68
Power supply	24 V AC, 24 V DC, 115 V AC, 230 V AC, special voltages available
Control/output signals	several control and output signal shapes possible as standard
further options	Explosion protection, additional limit switches, heating, outdoor hood



Modular electric actuator baelz 373-E08

- ✓ Optional fail-safe function
- ✓ Variable force: 1000 - 8000 N
- ✓ Automatic stroke range detection
- ✓ Multiple operating options



Positioner baelz 7022 installed in the digital fail-safe motorized linear actuator **baelz 373-E07-OSD/OSZ**

Ask Baelz!

At www.baelz.de you will find further details on our energy-saving products and systems. Please feel free to take a look. Of course, we are just as happy for you to contact us personally with your questions.

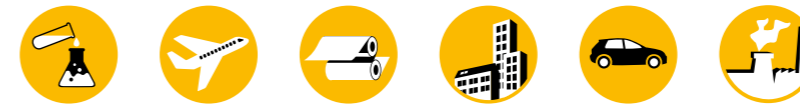


The electropneumatic **positioner baelz 87** for controlling pneumatic actuators, shown here with optional pressure gauge block.



Baelz applications

When it comes to heating or cooling, Baelz ensures the optimal use of energy in industrial processes and building services systems in a wide range of sectors. Our product range includes not only control valves but also our own heat exchangers, controlled ejectors and actuators. With Baelz, you can save energy in almost any application!



Baelz systems

Saving energy has been a top Baelz priority right from the start. For our numerous energy- and resource-saving processes, we not only offer a unique range of individual components and sound advice on the design of systems, but also comprehensive solutions for industry, building technology and heat transfer. Baelz Steam Terminal® system solutions, for example, are fully piped and wired, thermally insulated and mounted on a skid if required.



Benefits of our extensive portfolio

- 👍 Excellent value for money
- 👍 Many goods in stock - high availability
- 👍 Durable, robust, low maintenance
- 👍 Large selection and combinability
- 👍 Short delivery times, even for special fittings
- 👍 Body materials spheroidal graphite cast iron, cast steel, stainless steel, forged steel
- 👍 Special designs possible
- 👍 Products according to DIN and ANSI norms
- 👍 Long availability of spare parts
- 👍 Very low leakage rates of 0.004 %, 0.0 % in soft-sealing version





Are you interested in saving energy and money with our durable and reliable valves? We would be happy to offer you a solution to suit your operating conditions without obligation. Please fill out our inquiry form, which you can access by clicking on the button below or at <https://www.baelz.de/en/baelz-active/inquiry>

Enquiry Form
Control Valves

Please fill in this form as thoroughly and accurately as possible so that we can provide you with a suitable quotation promptly. Many thanks.

Enquiry date: _____
Quote date: _____

1. Sender
Company: _____
Address: _____
Contact: _____
Email: _____
Telephone: _____

2. Technical parameters

Fluid: 2.1 Steam 2.2 Water 2.3 Thermal oil 2.4
only for 2.3/2.4: Density: _____ Dyn. viscosity: _____

Design
 2-way valve 3-way mixing valve 3-way diverting valve
3rd way tight closing? YES NO

Connections DIN flanges ANSI flanges Weld connections Socket
Material Spheroidal iron Cast steel Stainless steel Red bronze

Temperature °C Betrieb: _____ Min.: _____ Max.: _____
Pressure barg Betrieb: _____ Min.: _____ Max.: _____

Specifications where applicable
Nominal diameter DN: _____ Nominal pressure PN: _____ Kvs value: _____

3. Design parameters

Flow rates Mass flow rate kg/h: _____ Volume flow rate m³/h: _____
Temperature °C Inlet: _____ Outlet: _____
Pressure barg Inlet: _____ Outlet: _____

Remarks: _____

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