

Proportional pressure regulators VEAA/VEAB

FESTO



The future is piezo!

Highlights

- Silent
- Durable
- Very low energy consumption
- High precision
- Wide pressure range: -1 ... 10 bar
- Simple electrical and pneumatic interfaces

The VEAA and VEAB feature an innovative drive component – a piezo bender. These valves offer high-precision flow control at up to 20 l/min. – with low hysteresis, high repeat accuracy and low energy consumption. The proportional characteristics of a piezo bender with direct actuation ensure stable and reliable regulation – and a stepless pressure rise. Especially interesting for many industry segments is that the VEAA and VEAB operate entirely silently.

Extremely long service life as standard

Since the piezo component is virtually immune to mechanical wear and doesn't abrade, the valves offer a very high number of switching cycles (≥ 300 million) or setpoint changes.

User-friendly

Control parameters can be selected from the values stored in the electronics to cover virtually all your applications. No need to set any parameters – simply connect and you're ready to go!

Perfect pressure regulation

Compared to pressure regulators using on/off valve technology, the valves VEAA and VEAB offer precise, silent and stable regulation to a preset value without fluctuations in the output pressure – even with varying air consumption.

Even for very small volumes

VEAA/VEAB can regulate very small volumes reliably, as well as vacuum and overpressure.

Proportional pressure regulators VEAA/VEAB

Created for maximum performance with small and micro volumes

For maximum performance and total economy. The VEAA and VEAB combine innovative piezo technology with digital closed-loop control technology. This makes them attractive for many applications as it offers excellent key features, such as:

- Efficient pressure regulation characteristics
- Long-term stability
- High repeat accuracy
- Low hysteresis
- Silent operation
- Extremely low energy consumption

VEAA and VEAB are particularly suitable for pressure regulation applications with low to micro air consumption with cylinders, grippers and rotary actuators, as well as for applications requiring highly dynamic response characteristics.

Examples include pressure over

liquid, controlling contact-pressure cylinders or low-pressure regulation for wafer production.

Main industry segments

- Special machine construction
- ELA/small parts assembly
- LifeTech
- Special machines
- Printing and paper machines
- Food processing and packaging machines
- Electrical engineering industry
- Machine tools

Applications

- Pressure regulation
- Checking
- Aspiration and dispensing
- Pressing
- Press-fitting



VEAA



VEAB

Technical data			
Valve function	3-way proportional pressure regulator		
Flow rate [l/min.] at 6→5 bar		VEAA 7 l/min.	VEAB 20 l/min.
Pressure ranges [bar]		0.02 ... 2 0.06 ... 6 0.1 ... 10	-1 ... 0 +/-1 0.002 ... 0.2 +/- -0.5 0.01 ... 1 -1 ... 5 0.02 ... 2 0.06 ... 6
Pneumatic port	QS 4 mm		
Setpoint value	0 ... 10 V, 4 ... 20 mA		
Actual value	0 ... 10 V, 4 ... 20 mA		
Electrical connection	M8 plug, 4-pin		
Connecting cables	Pre-assembled		
Degree of protection	IP65		