

WEST

Power amplifiers for hydraulic proportional valves



The possibility of universal use, the independency from different hydraulic manufacturers and thus simple handling are the outstanding features of our power amplifiers.

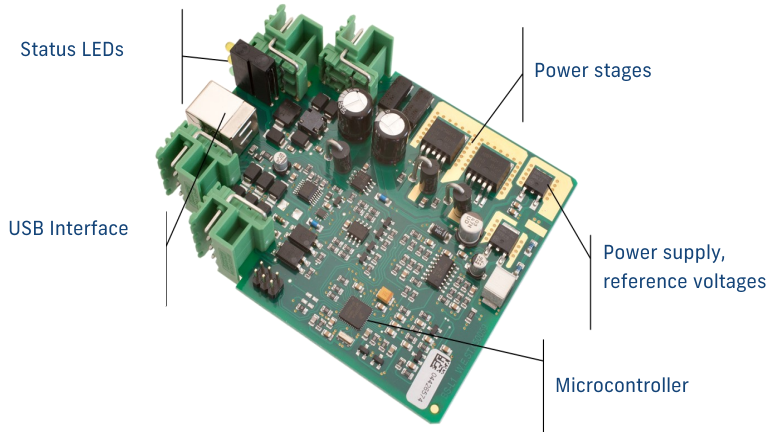
Control and commissioning stay the same,
regardless of valve brand.



Electronics
Hydraulics meets
meets Hydraulics
Electronics

WEST

Power amplifier for proportional valves



Our power amplifiers are available in different designs. All share a consistent hardware concept and an internal signal processing via a micro controller. Thus, the level of quality can be retained on a high standard with little effort.

Our PAM-199-P is the basis and at the same time the most used product. It is characterized by universality and robustness.

In the age of digitalization and industry 4.0, the decisive step is the transition to the digital interface (fieldbus interface). This is made available with these modules.

Besides **Profibus**, **PROFINET**, **EtherCAT** and **Ethernet/IP** we also offer devices with **IO-Link** interface. The advantages of digitalization lie basically in simpler and solidier cabling, better diagnostic possibilities and shorter downtimes in case of replacement.



PAM-140

Technical characteristics:

- Freely scalable input signals
- Ramp generator
- MIN MAX adjustment
- Freely definable flow or pressure characteristics
- Adjustable rated current (in mA)
- Short circuit protected power stage by the use of intelligent „power high side switches“
- Wire break monitoring
- Adjustable PWM-frequency (60... 2600 Hz)
- Separate dither function (triangular waveform dither / square wave-dither)

Suitable for valves
of the following manufacturers:

BOSCH REXROTH

PARKER

HYDAC

DUPLOMATIC

and many more

We offer modules which are usable for all proportional valves of different hydraulic manufacturers.

No matter which valve you use, our power amplifiers are a constant in your system.

Products

PAM-190-P: Amplifier plug

- With analog 0... 10 V or 4... 20 mA interface
- Alternatively with IO-Link interface
- Also suitable as switching amplifier to achieve a soft pressure build-up and reduction
- Alternative: **PAM-140** for free wiring



PAM-392-P: Plug amplifier for 2 solenoids

- with analog setpoint specification for direct mounting on the valve and control of directional valves with 2 magnets.

PAM-193-P: Snap-On power amplifier

- Universal power amplifier, with analog adjustment via potentiometers
- Suitable for nearly all standard valves



PAM-199-P: Snap-On power amplifier

- Universal power amplifier, parameterizable via USB-interface
- Our most efficient module with versatile adaptabilities to different valves and applications
- More than 50.000 modules in use



PAM-199-P-*: Snap-On power amplifier with fieldbus interface

- Based upon PAM-199-P

Plug amplifier
PAM-193
PAM-199



PAM-392-P on the valve



PAM-199 with
fieldbus interface

Your advantages:

- Uniform product family
- Compact housing
- Inexpensive Snap-On solution
- Pioneering due to the integration of different fieldbuses
- Universally usable





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We offer an extensive product line for all typical applications, from simple power amplifiers to p/Q regulated press control systems, up to multi-axis closed-loop synchronization control systems. Custom developments for the clients are one of the strengths and many products for our well-known hydraulic manufacturers are being equipped with "brand labels". Premium quality, extremely short delivery times, flexibility, as well as fast assistance in case of emergencies – without the usual red tape – is what keeps the customers very satisfied.

Besides electronic products, W.E.St. Elektronik GmbH also offers competent support in the application of proportional control valves.

Application areas:

The sophisticated design does not only address one specific application area but rather focuses on the universal use. Although, emphasis is put on industrial applications, however, the power amplifiers can be found in mobile as well as in marine applications (with GL approval).

Our products:

Analog and digital power amplifiers	universally adaptable, for the control of various proportional control valves. The completely digital modules distinguish themselves through their high flexibility and fault diagnosis.
Positioning modules	which are optimized for fast moving cycles and highly dynamic control systems.
Pressure controlling	with pressure valves control valves and variable displacement pumps with simple and robust control behavior.
Synchronization modules	for synchronized control systems in bypass or as a synchronized position control system with integrated pressure limitation control (optional use).
Pump control	systems for various displacement and servo pumps.
Fieldbus connections	for the most of our control modules. The products support CAN Bus, Profibus, PROFINET, EtherCAT and various Ethernet versions.

Our additional services:

Development of custom electronics according to your specification
 Planning and production of electronics
 Training for our standard products as well as training for special subjects
 Pictures: PHOTOmotics

