



PVA204, PVA208 Proportional Valve Amplifiers

The PVA204 and PVA208 modules are used to directly control non-amplified proportional valves with a single coil, bipolar coils or dual coils. Up to 4 coils can be connected to the compact PVA204 module, and 8 coils on the PVA208, thus up to 8 unipolar valves with a width of 55 mm. The current-regulated control means that the self heating or temperature increases of the valve solenoids do not affect the position of the valve. Up to 20 support points are provided for correcting the characteristic curve of each coil, thus ensuring very accurate linearization.

Besides the fully configurable dither function, ramps of 0.1 s to 15 s can be set. The ramp setting range permitted during commissioning can be configured in the SolutionCenter, thus preventing possible damage to the plant resulting from incorrect entries. Most parameters (characteristic curve, dither parameter etc.) can be configured directly via an application program or via the SolutionCenter or online via a web configurator. Configuration can thus be completed quickly and simply for all tasks e. g. for commissioning, remote maintenance, adaptive adjustments or valve exchanges during servicing. The valve configurations can be stored as templates. This allows different valves to be used quickly and easily in a plant without having to adapt the application program.

Part type designation	Part number
PVA204	00028007-00
PVA208	00026349-00
PVA208 CC	00028446-00

Features

- Proportional valves with unidirectional, bidirectional or dual coils
- PVA204: 4 coils, PVA208: 8 coils
- Current-regulated control
- Characteristic curve correction, overlap and underlap correction
- Adjustable dither and ramp
- Configuration via application program, SolutionCenter and web configurator

PVA204, PVA208

Parameter	PVA204	PVA208
Valve types	Unipolar coil, bipolar coils or valves with 2 coils	
Coils (unip./bip./2xunip.)	4/2/2	8/4/4
Voltage	24 V DC (18 V to 34 V)	
Coil current max. (unip./bip./2xunip.)	2.5 A (Total max. 8 A)	2 A (Total max. 8 A)
Impedance	$L \geq 1 \text{ mH}$, $R > 2 \Omega$	
Current	Regulated, $\pm 5 \text{ mA}$ accuracy, short-circuit-proof	
Dither	Adjustable from 0 % to 30 % in 0.1 % of I_{nom}	
Dither frequency	40 Hz to 500 Hz	
Characteristic curve		
Rising / falling ramp time	1 ms to 15 s	
Ramp range	Adjustable ramp time, min/max limit configurable	
Ramp resolution	1 ms	
Characteristic curve correction	2 to 20 support points per quadrant	
Underlap/overlap	Compensation via characteristic curve table	
Characteristic curve linearization	Linear (standard), spline	
Power supply		
Coil supply voltage	24 V DC (18 V to 34 V)	
Coil supply current	Max. 8 A	
Connection		
Coil supply	1x 2pole RM 5.08	
Coil connection	1x 8pole RM 3.5 connection for 4 coils	2x 8pole RM 3.5 2 connections for 4 coils each
Approvals/Certificates		
General	CE, UKCA, cULus	
Marine	ABS, BV, DNV, KR, LR, NK, RINA	
Environmental conditions		
	Standard	ColdClimate (❄️)
Operating temperature	-30 °C to +60 °C	
Relative humidity, operation	5 % to 95 % noncondensing	5 % to 95 % with condensation
Storage temperature	-40 °C to +85 °C	
Relative humidity, storage	5 % to 95 % with condensation	5 % to 95 % with condensation
Pollution degree acc. IEC 60664-1	2 (noncondensing)	2

Order data

Part type designation	Part number	Description
PVA204	00028007-00	Proportional Valve Amplifier module: 4 coils, bidir/unidir/2x coils valves; Characteristic curve correction; UN=18-34 V DC; $I_{\text{max}}=2.5 \text{ A}$; $f_{\text{Dither}}=40 \text{ Hz}$ to 500 Hz; $\text{DitherAmp}=0 \text{ \% to } 30 \text{ \% } I_{\text{nom}}$
PVA208	00026349-00	Proportional Valve Amplifier module: 8 coils, bidir/unidir/2x coils valves; Characteristic curve correction; UN=18-34 V DC; $I_{\text{max}}=2.0 \text{ A}$; $f_{\text{Dither}}=40 \text{ Hz}$ to 500 Hz; $\text{DitherAmp}=0 \text{ \% to } 30 \text{ \% } I_{\text{nom}}$
PVA208 CC	00028446-00	Like PVA 208, ColdClimate (❄️)

Accessories

Part type designation	Part number	Description
KZ-PVA204 B	00028033-00	Terminal set Phoenix cage clamp (1x KZ 51/02; 1x KZ 35/08) with labeling strips
KZ-PVA208 B+C	00028032-00	Terminal set Phoenix cage clamp (1x KZ 51/02; 2x KZ 35/08) with labeling strips and coding elements