Electronics





Electronic accessory components

A range of electronic accessory components is available in various versions for the control of common on/off and proportional solenoids. These include electronic amplifiers in the form of modules and cards and versions integrated in the plug for single and twin solenoids, as well as for pressure switches. A power supply unit for 24V DC solenoid valves is also available. All of these components are tailored to HAWE solenoid valves.

Features and benefits:

- Compact design
- Functions tailored to HAWE products

Intended applications:

- For control of all types of proportional valves
- Plug for visual operation control, prolonging the service life of the solenoid etc.



Nomenclature:

- Plugs with no special feature (standard) With rectifier circuit With clamp diode
- With LED with economy circuit

 Amplifier units
 for proportional solenoids
- Power supply units

Design:

Modules with screw terminals
Cards with terminal strip

Designs

Plug for solenoid valves (single and twin solenoid)

Brief description	Application For all applications with no special requirements	
No special feature (standard)		
Version with LED	Visual operation control and EMC protection (note prolonged cut-off times)	
Version with clamp diode	For optimum EMC protection (note prolonged cut-off times)	
Version with economy circuit	Increased functional security and prolonged service life of the solenoids by reducing the voltage (pulse width modulation) after a defined period. Recommended for use in areas with high ambient temperatures and/or for application where the solenoids are permanently energised (e.g. safety circuits)	
Version with rectifier circuit	Enables use of DC solenoids when a power supply of 110V AC, 230V AC is available	

Plugs with no special feature (DC voltage supply) or the version with rectifier circuit for power supply of 110V AC, 230V AC are included as standard in the scope of delivery of the solenoid valve.

Features:

Constant current control (regardless of the power supply and changes in resistance of the solenoid due to heating effects)

■ Improved EMC properties

Proportional amplifier

Use in a broad temperature range

Adjustable parameters:

- \blacksquare I_{max} and I_{min} setting
- Setting for ramp time up to 10 sec
- Reference voltage for potentiometric setpoint generator available
- Option to set dither amplitude and frequency

Туре	Brief description	Application
EV 1 M EV 1 G EV 1 D	Module version (board only or built-in housing)	Suitable for installation in switch cabinets, secured with screw terminals
EV 22 K	Card version	Card suitable for control of two proportional solenoids. Use in card holder for one, or in a module rack for max. 3 amplifier cards

Power supply units for solenoid valves

Туре	Brief description	Application
	230V AC and output voltage 24V DC,	Power supply for solenoid-actuated hydraulic valves or electrical amplifiers for proportional solenoids

Associated technical data sheets:

Please check whether correct links are inserted

Pluas:

- Socket connectors (type overview): D 7163
- Economy circuits for WG 230 actuating solenoids: <u>Directional</u> seated valves: D 7831
- Economy circuit plug type MSE 28026 with adjustable economy voltage: D 7832
- Type MSD 4 P55 line connector with economy circuit for 24 VDC: D 7833

Electronic amplifiers:

- Type EV1M 2-12/24 and EV1M 2-24/48 electronic amplifier: D 7831/1
- Electronic amplifier type EV1D: D 7831 D
- Electronic amplifier type EV1G1-12/24: D 7837
- Electronic amplifier type EV22K2-12/24: D 7817/1

Power supply units:

Power supply unit type MNG 2,5-230/24 and MNG 5-230/24:
 D 7835

Further information:

- Possible combinations of valves and electronic accessories: P 7163
- Joysticks type EJ: D 7844

Programmable logic valve controls:

- Type PLVC 21: <u>D 7845-21</u>
- Type PLVC 41: <u>D 7845-41</u>
- Type PLVC 8: <u>D 7845 M</u>

CAN node

■ Type CAN-IO 14: **D 7845 IO**

Suitable products:

Lifting modules:

■ Type HMT etc.: Sk 7758 HMT

Prop. pressure valves:

- Type PM, PMZ: <u>D 7625</u>
- Type PMV, PDV: <u>D 7485/1</u>, <u>D 7486</u>
- Type PDM: <u>D 7486</u>, <u>D 7584/1</u>

- Prop. directional seated valves type EMP: <u>D 7490/1</u>
- Prop. directional spool valves type PSL, PSV: <u>D 7700-2</u>, <u>D 7700-3</u>, <u>D 7700-5</u>
- Prop. flow control valves type SE, SEH: <u>D 7557/1</u>

Electronic pressure sensors:

■ Type DT 11 and DT 2: <u>D 5440 T/2</u>, <u>D 5440 T/1</u>