

PWM Control Electronics for Solenoid Control Valves

8605

- Programmable digital electronics
- Converts an analogue input signal into a PWM output signal
- Adjustable PWM frequency
- Digital communication possible (bÜS)
- Optional integrated time control and digital/analogue input signals



The digital control electronics Type 8605 are used to operate proportional solenoid control valves in a power range from 40-2000 mA. The electronics convert an external standard signal into a pulse-width modulated (PWM) signal, which enables infinite adjustment of the opening of the proportional valve and hence a fluidic output parameter (e.g. flow rate). An internal current control with the duty cycle of the PWM signal as an actuating variable ensures that every value of the input signal, irrespective of the thermal state of the coil, is unambiguously assigned a given value of the effective coil current. A display and operating keys allow the electronics to be easily adapted to a particular proportional valve and to the specific conditions of an application. In order to integrate the control unit - and thus also the proportional valve - into a higher-level controller, the CAN-based variant of the control unit (called bÜS) is required. Parameterisation and configuration of the proportional valve can be performed quickly and easily using the Bürkert Communicator software. Furthermore, the bÜS control electronics enables the integration of shut-off valves into bÜS/CAN systems. By using the integrated time control function, a shut-off valve can be opened or closed for a certain period of time. This enables, for example, batch control solutions in filling processes. Optionally, Type 8605 can be equipped with an additional I/O board. This allows the connection of external sensors or switches. The valve behaviour on these input signals can be configured (e.g. 2-point control).

Ordering Chart

Type 8605 control for proportional valves

Note:

- For two possible current ranges, the smaller one should be preferred.
- When using the control electronics in combination with valves from other manufacturers, make sure that these valves do not fall below a minimum load of 7Ω. Activation of valves with lower minimum load will damage the Type 8605 electronic control unit.

Version	Max. coil current range [mA]	Item no.	2861, 2871 24 V DC	2861, 2871 12 V DC	2863, 2873 24 V DC	2863, 2873 12 V DC	2865, 2875 24 V DC	2865, 2875 12 V DC	2836 24 V DC	6024 24 V DC	6024 12 V DC	6223 24 V DC	6223 12 V DC
Cable plug with PG gland	200...1000	316530			x	x	x			x		x	
Cable plug with M12 connection	200...1000	316528			x	x	x			x		x	
Cable plug with PG gland	500...2000	316529			x	x	x	x	x	x	x		x
Cable plug with M12 connection	500...2000	316526				x	x	x	x	x	x		x
Cable plug with PG gland without control unit	200...1000	316521			x	x	x			x		x	
Cable plug with M12 connection without control unit	200...1000	316522			x	x	x			x		x	
Cable plug with PG gland without control unit	500...2000	316523				x	x	x	x	x	x		x
Cable plug with M12 connection without control unit	500...2000	316525				x	x	x	x	x	x		x
DIN rail	40...220	316531	x										
DIN rail	200...1000	316532	x	x	x	x	x			x		x	
DIN rail	500...2000	316533				x	x	x	x	x	x		x
Cable plug with M12 connection bÜS PWM	200...1000	355655			x	x	x			x		x	
Cable plug with M12 connection bÜS PWM	500...2000	364714				x	x	x	x	x	x		x

Type 8605 (bÜS) control for shut-off/solenoid valves

Version	Item no.
Cable plug with M12 connection	302988
Cable plug with M12 connection and sensor input (M12)	302990

Accessories - Analogue version

Accessory	Item no.
Control unit for Type 8605 Cable plug	582878
Right-angle plug M12 4-pol.	784301
M12 connecting cable 4-pol. 5 m length	918038
Cover set (for control electronics without control unit)	670549