

# Control Electronics for Solenoid Control Valves

8605

- Microprocessor-controlled electronics
- Selectable input signal
- Adjustable PWM frequency
- Optional RS232 or RS485 interface

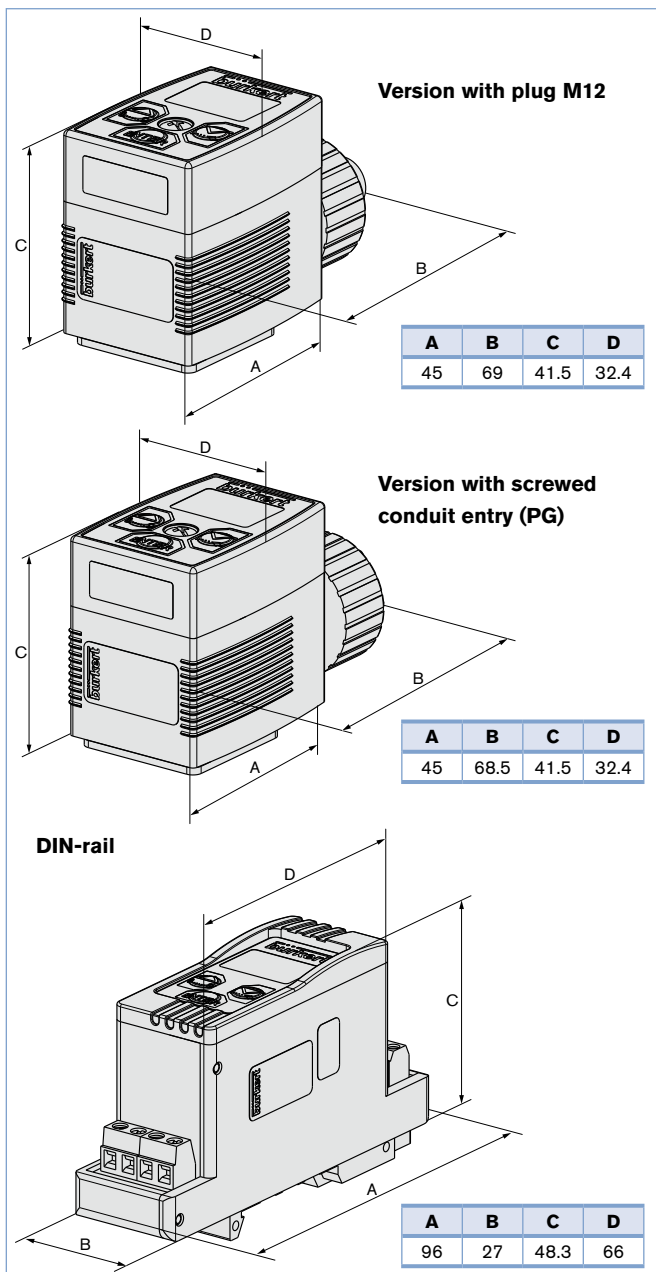


The digital control electronics, Type 8605, serves to operate valves in the power range from 40 - 2000 mA. The electronics converts an external standard signal into a pulse-width modulated (PWM) signal with which the opening of the valve and hence a fluidic output parameter (e.g. flow rate) can be infinitely varied. An internal current control with the duty cycle factor of the PWM signal as control variable ensures that every value of the input signal, irrespective of the thermal condition of the coil, is unambiguously assigned a given value of the effective coil current. Compared to DC operation of solenoid control valves the PWM operation improves, among others, their sensitivity and hysteresis. A display and operating keys allow the electronics to be easily adapted to a particular solenoid control valve and to the concrete conditions of an application.

## Technical Data

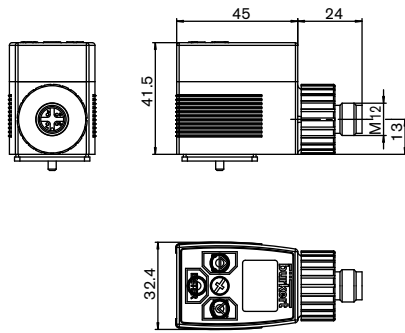
<b>Operating voltage</b>	12V DC or 24 V DC
<b>Voltage tolerance</b>	±10%
<b>Residual ripple</b>	<5%
<b>Power consumption</b>	approx. 1 W (without valve)
<b>Output current (valve)</b>	Max. 2 A
<b>Ambient temperature</b>	-10 °C to 60 °C
<b>Input signal</b>	0-20 mA, 4-20 mA or 0-5 V, 0-10 V (configurable)
<b>Input impedance</b>	<200 Ω (with current input) >20 kΩ (with voltage input)
<b>Output signal for valve control</b>	PWM signal – frequency adjustable from 80 Hz to 6 kHz
<b>Ramp function</b>	Time variable from 0 to 10 s
<b>Version</b>	Cable plug for direct installation (with PG or M12 connection) DIN-rail version (DIN EN 50022)
<b>Protection class</b>	Cable plug – IP65 DIN-rail – IP40
<b>Housing material</b>	Cable plug – Polyamide / PC DIN-rail – Polyamide / PBT

## Envelope Dimensions [mm] (see datasheet for details)

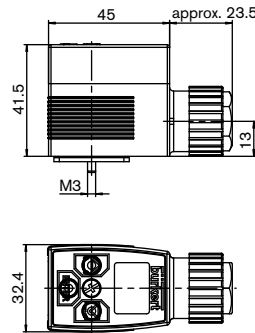


**Cable plug with operating unit**

Version with plug M12

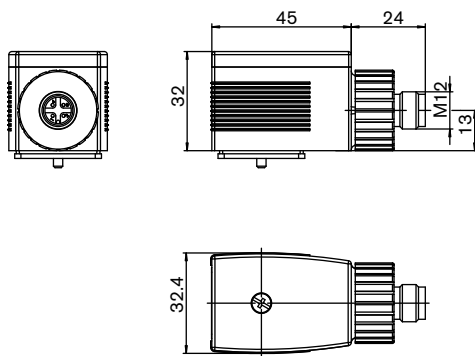


Version with screwed conduit entry (PG)

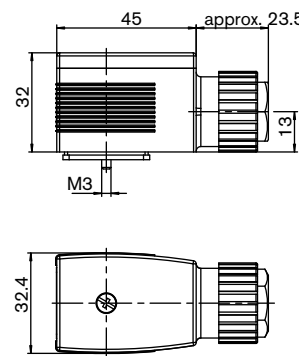


**Cable plug without operating unit**

Version plug M12



Version with screwed conduit entry (PG)



**DIN-rail**

