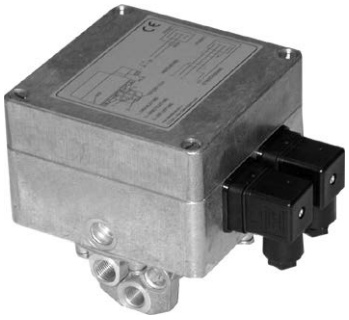
E/P pressure regulator, Series EV07

► Qn= 800 l/min ► Compressed air connection output: G 1/4 ► Electr. connection: Plug, EN 175301-803, form A ► Signal connection: input and output, Plug, EN 175301-803, form A ► Pilot valves



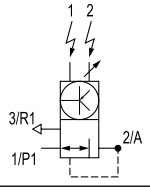
P561_028

Version	Poppet valve
Control	Analog
Certificates	CE declaration of conformity
Ambient temperature min./max.	+5 °C / +50 °C
Medium temperature min./max.	+5 °C / +50 °C
Medium	Compressed air
Max. particle size	50 µm
Max. oil content of compressed air	0.1 mg/m³
Qn	800 l/min
Mounting orientation	vertical
Operating pressure	See table below
Hysteresis	0,04 bar
DC operating voltage	24 V
Voltage tolerance DC	-20% / +20%
Permissible ripple	5%
Max. power consumption	0.2 mA
Protection class	IP54
Compressed air connection input	G 1/4
Compressed air connection output	G 1/4
Compressed air connection, exhaust	G 1/4
Weight	2 kg
Materials:	
Housing	Die-cast aluminum
Seal	Acrylonitrile Butadiene Rubber

Nominal flow Qn with working pressure 7 bar, with secondary pressure 6 bar and Δp = 0.2 bar

Technical Remarks

- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- The protection class is only ensured when the plug is mounted properly. For detailed information, see operating instructions.

	Operating pressure max.	Pressure setting range min./max.	Nominal input value		Actual output value		Note	Part No.
	[bar]	[bar]						
	8	0.1 / 6	0 - 20	mA	0 - 20	mA	-	**5610102050**
	8	0.1 / 6	0 - 20	mA	4 - 20	mA	-	5610102060
	8	0.1 / 6	0 - 10	V	-	-	1)	**5610102070**
	8	0.1 / 6	4 - 20	mA	4 - 20	mA	-	**5610102150**
	11	0.15 / 10	4 - 20	mA	4 - 20	mA	-	**5610102170**

1) Output 10V constant to supply a potentiometer
Minimum working pressure = 0.5 bar + max. required secondary pressure
The zero point and range of the output characteristics curve can be adjusted. The recommended range for the pilot device is 0.1 to 6 bar.

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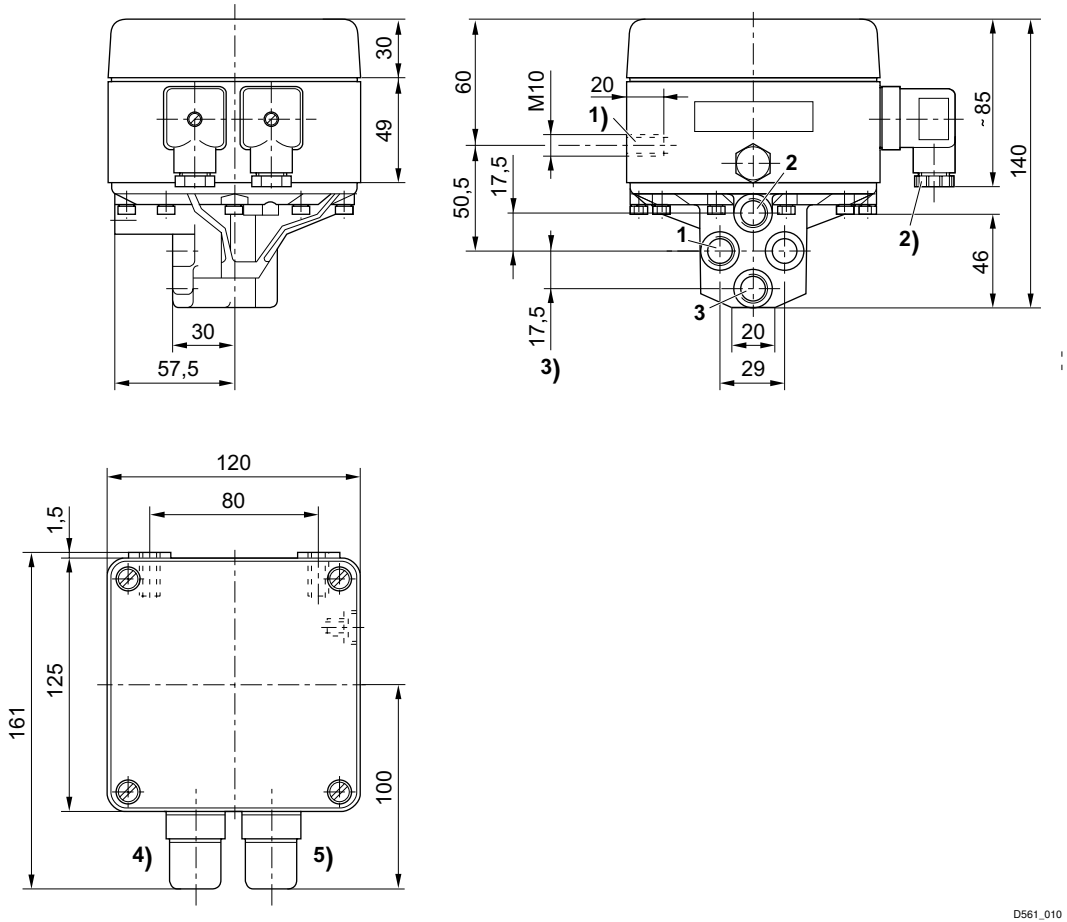
Dimensions

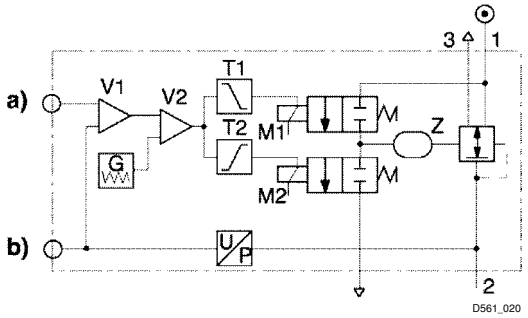


1) mounting thread
2) PG 9
3) threaded connection 1 - 3 = G1/4 ISO 228/1:2000
4) plug 1
5) plug 2

E/P pressure regulator, Series EV07

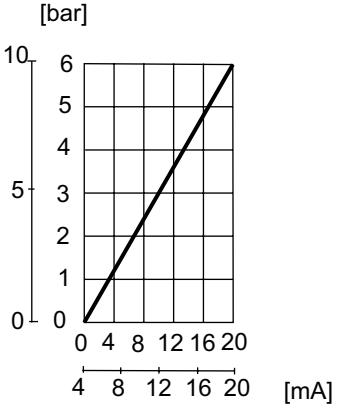
► Qn= 800 l/min ► Compressed air connection output: G 1/4 ► Electr. connection: Plug, EN 175301-803, form A ► Signal connection: input and output, Plug, EN 175301-803, form A ► Pilot valves

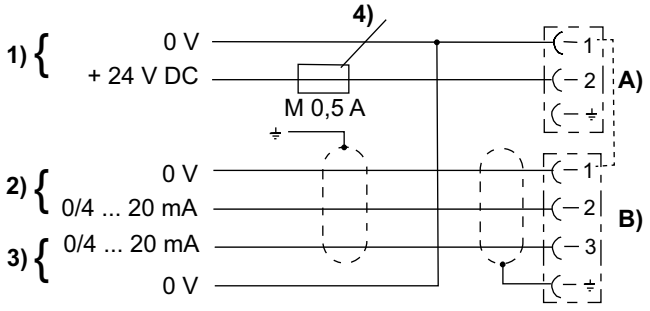
Functional diagram



a) Nominal input value b) Actual output value
The E/P pressure control valve modulates the pressure corresponding to an analog electrical nominal input value.
The integrated electronics make a comparison between the nominal input value and the pressure in the output line (actual value).
The controller generates electrical input signals, which either ventilate or exhaust control volume Z of the relay valve by means of two pilot valves (M1, M2) until the specified pressure is attained in the output line.
1) Operating pressure
2) Working pressure
3) Exhaust

Fig. 1, Characteristic and pin assignment for current control with actual output value





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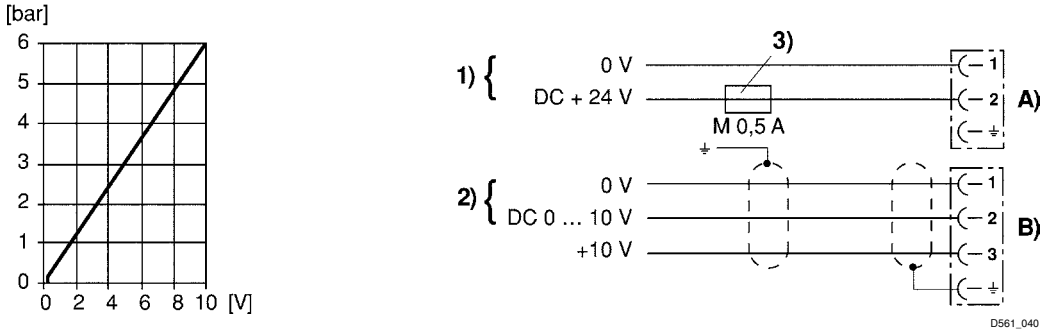
1) Supply voltage
2) Input current nominal value (ohmic load 100 Ω, max. 50 mA).
The (+) and (-) connection potential must be in the range 0-12 V related to plug 1, pin 1.
3) Actual output value (max. total resistance of downstream devices < 300 Ω)
The actual value is measured between plug 2, pin 3 and plug 1, pin 1. The actual value is short circuit resistant for a limited time.
4) The supply voltage must be protected by an external M 0.5 A fuse.
Connect plug 2 via a shielded cable to ensure EMC.
A) Plug 1 B) Plug 2

E/P pressure regulator, Series EV07

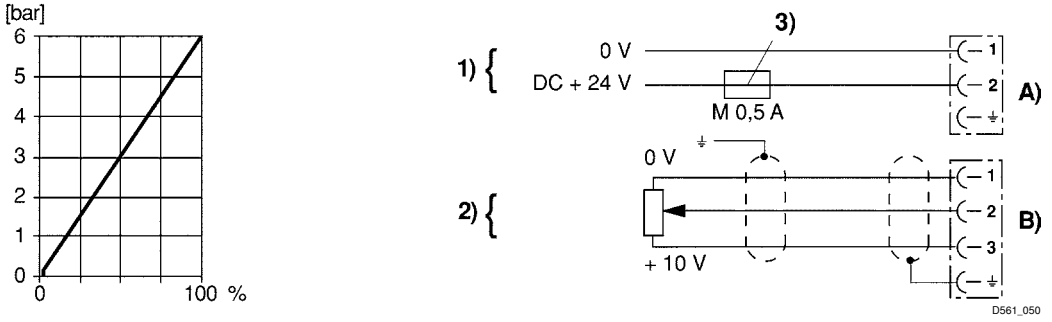
► Qn= 800 l/min ► Compressed air connection output: G 1/4 ► Electr. connection: Plug, EN 175301-803, form A ► Signal connection: input and output, Plug, EN 175301-803, form A ► Pilot valves

Fig. 2, Characteristic and pin assignment for voltage control with actual output value



1) Supply voltage
2) Voltage control
3) The supply voltage must be protected by an external M 0.5 A fuse.
Connect plug 2 via a shielded cable to ensure EMC.
A) Plug 1 B) Plug 2

Fig. 3, Characteristic and pin assignment for potentiometer control without actual output value



1) Supply voltage
2) Potentiometer control (0 - 2 kΩ (min.), 0 - 10 kΩ (max.))
3) The supply voltage must be protected by an external M 0.5 A fuse.
Connect plug 2 via a shielded cable to ensure EMC.
A) Plug 1
B) Plug 2