





E/P pressure regulator, Series EV03

- Display: display
- Qn = 550 l/min
- Compressed air connection output G 1/4
- Electr. connection M12, 5-pin, A-coded
- Pilot valves
- With collective pilot air exhaust



Version	Poppet valve
Working pressure max	11 bar
Ambient temperature min./max.	-10 ... 60 °C
Medium temperature min./max.	-10 ... 60 °C
Compressed air connection input	G 1/4
Compressed air connection output	G 1/4
Compressed air connection, exhaust	G 1/8
Medium	Compressed air
Max. particle size	40 µm
Oil content of compressed air	0 ... 5 mg/m ³
Nominal flow Qn	550 l/min
Control	Analog
DC operating voltage	24 V
Voltage tolerance DC	-20% / +30%
Permissible ripple	5%
Protection class	IP65
Weight	0,27 kg
Nominal flow Qn with working pressure 7 bar , with secondary pressure 6 bar and Δp = 0.2 bar	

Technical data

Part No.		Pressure setting rangemin./max.	Nominal input value		Actual output value	
			Min./max.		Min./max.	
R414008246		0,5 ... 6 bar	0 ... 10 V		0 ... 10 V	
R414008251		0,5 ... 6 bar	4 ... 20 mA		4 ... 20 mA	
R414008256		0,5 ... 10 bar	0 ... 10 V		0 ... 10 V	
R414008261		0,5 ... 10 bar	4 ... 20 mA		4 ... 20 mA	
R414008247		0,5 ... 6 bar	0 ... 10 V		0 ... 10 V	
R414008252		0,5 ... 6 bar	4 ... 20 mA		4 ... 20 mA	
R414008257		0,5 ... 10 bar	0 ... 10 V		0 ... 10 V	
R414008262		0,5 ... 10 bar	4 ... 20 mA		4 ... 20 mA	
R414008229		0,5 ... 10 bar	0 ... 10 V		0 ... 10 V	
R414008232		0,5 ... 10 bar	4 ... 20 mA		4 ... 20 mA	

Part No.	Control	Max. power consumption		Repetitive precision	Hysteresis	
		mA				
R414008246	Analog	220 mA		0.04 bar	0.05 bar	1)
R414008251	Analog	220 mA		0.04 bar	0.05 bar	1)
R414008256	Analog	220 mA		0.04 bar	0.05 bar	1)
R414008261	Analog	220 mA		0.04 bar	0.05 bar	1)



Part No.	Control	Max. power consumption	Repetitive precision	Hysteresis	
		mA			
R414008247	Analog	160 mA	0.04 bar	0.05 bar	2)
R414008252	Analog	160 mA	0.04 bar	0.05 bar	2)
R414008257	Analog	160 mA	0.04 bar	0.05 bar	2)
R414008262	Analog	160 mA	0.04 bar	0.05 bar	2)
R414008229	Analog	160 mA	0.18 bar	0.2 bar	2)
R414008232	Analog	160 mA	0.18 bar	0.2 bar	2)

- 1) Power outage: operating line exhaust
- 2) Power outage: maintain pressure

Technical information

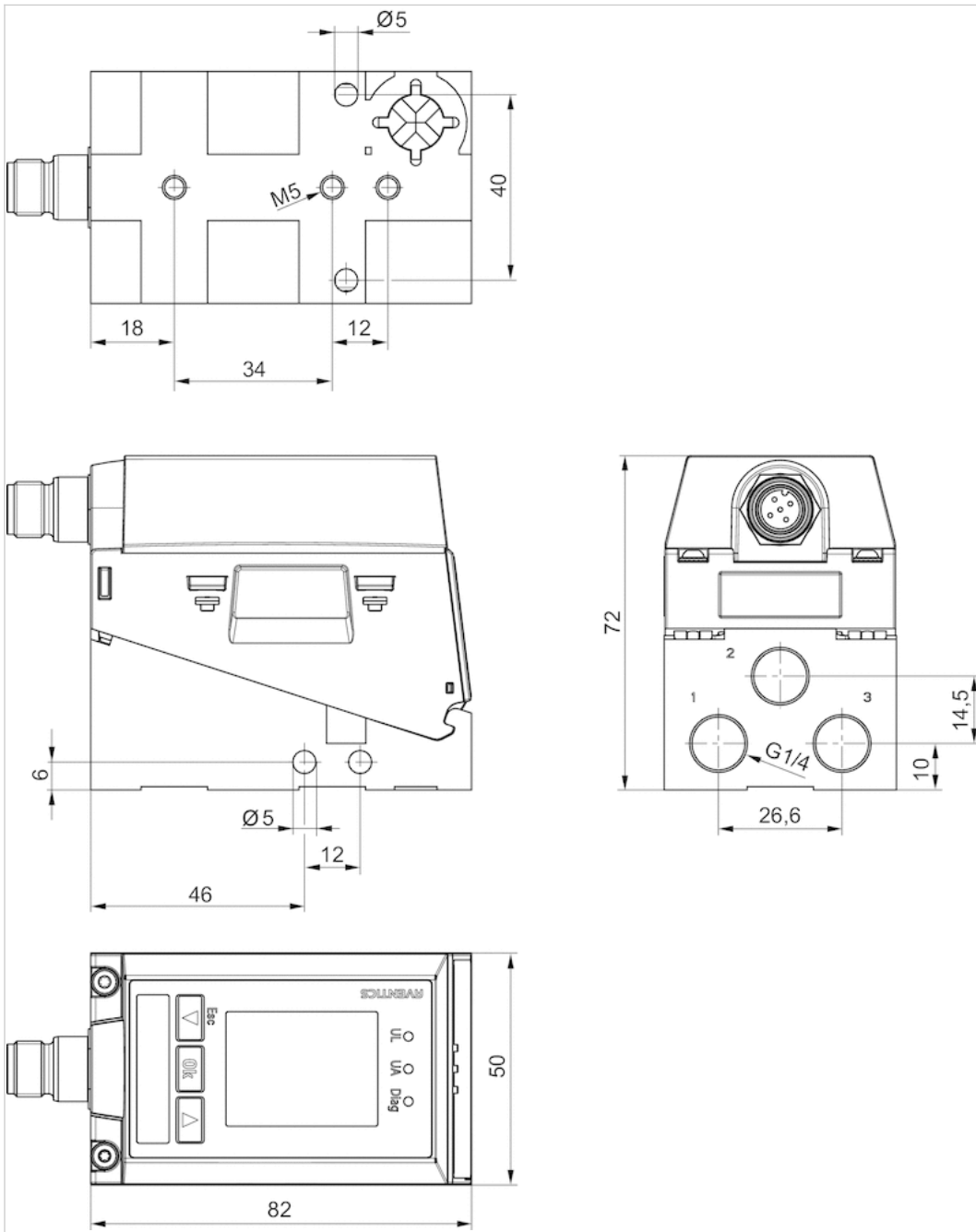
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
 The oil content of compressed air must remain constant during the life cycle.
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	Polyamide
Base plate	Aluminum
Seals	Nitrile butadiene rubber

Dimensions

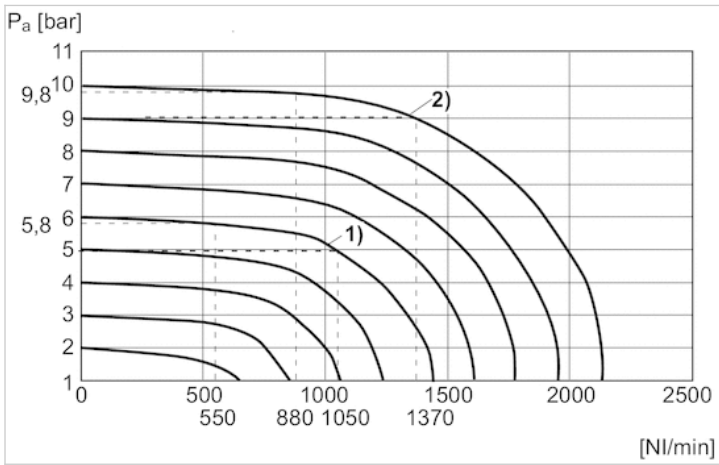
Dimensions



Port for plug M12x1

Diagrams

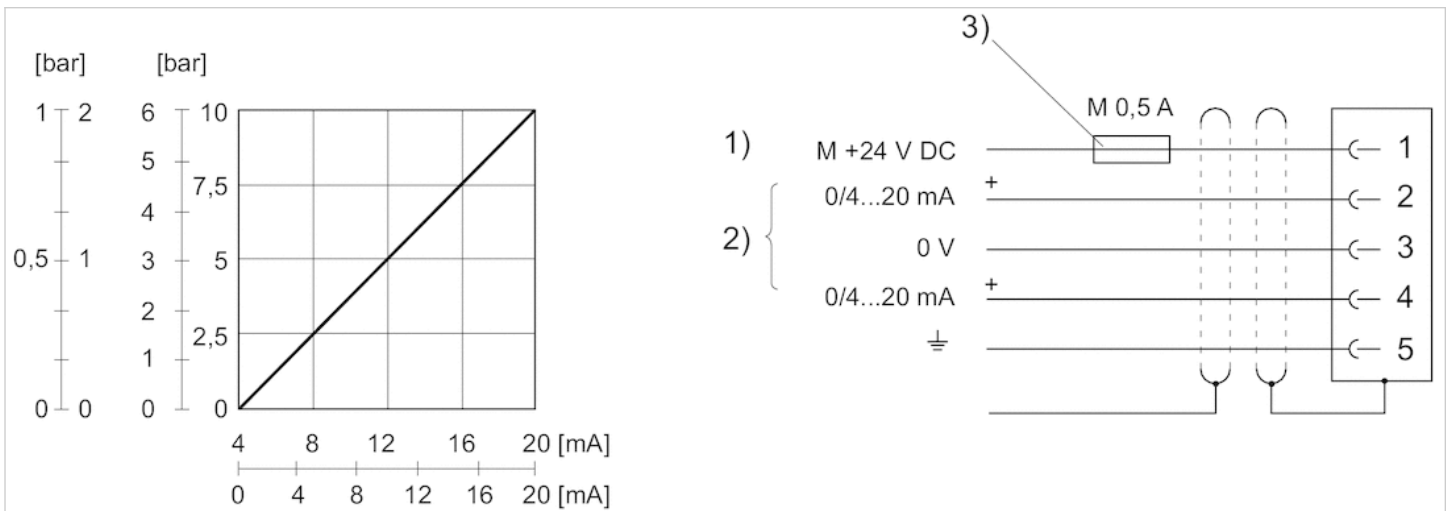
Flow characteristic curve



- 1) $P_v = 7$ bar
- 2) $P_v = 11$ bar
- P_v = Supply pressure
- P_a = Working pressure
- $P_v = P_a + 1$

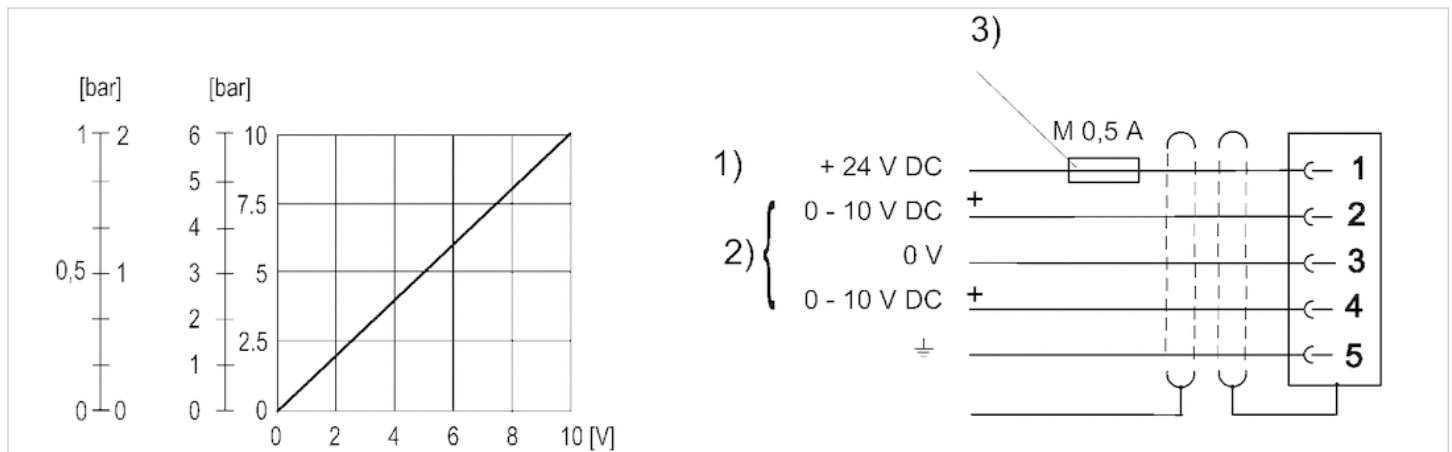
Circuit diagram

Characteristic and pin assignment for current control with actual output value



- 1) power supply
- 2) Actual value (pin 4) and nominal value (pin 2) are related to 0 V (pin 3). Nominal input value (ohmic load 100 Ω), actual output value: external ohmic load 300 Ω . If the power supply is switched off, the nominal input value is high-ohmic.
- 3) The power supply must be protected by an external M 0.5 A fuse. Connect the plug via a shielded cable to ensure EMC.

Characteristic and pin assignment for voltage control with actual output value



1) power supply

2) Actual value (pin 4) and nominal value (pin 2) are related to 0 V (pin 3). Nominal input value ($R = 1\text{ M}\Omega$), actual output value: min. load resistance $> 10\text{ K}\Omega$. If the power supply is switched off, the nominal input value is high-ohmic.

3) The power supply must be protected by an external M 0.5 A fuse. Connect the plug via a shielded cable to ensure EMC.