E/P pressure regulator, Series ED07

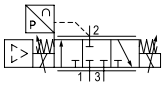
► Flow= 1.3 Cv ► Electr. connection: via signal connection ► Signal connection: input and output, Plug, M12, 5-pin

00123680

Version	Poppet valve
Control	Analog
Certificates	CE declaration of conformity
Ambient temperature min./max.	+41 °F / +122 °F
Medium temperature min./max.	+41 °F / +122 °F
Medium	Compressed air
Max. oil content of compressed air	1 mg/m³
Qn	1.3 Cv
Mounting orientation	α = 0 - 90° ±β = 0 - 90°
Operating pressure	See table below
DC operating voltage	24 V
Voltage tolerance DC	-20% / +30%
Permissible ripple	5%
Max. power consumption	1.4
Protection class	IP65
Weight	4.52 lbs
Materials:	
Housing	Die-cast aluminum; Steel
Seal	Hydrogenated acrylonitrile butadiene rubber

Nominal flow Qn with working pressure 101.5 psi, with secondary pressure 87 psi and Δp = 2.9 psi

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 27 °F under ambient and medium temperature and may not exceed 37 °F.
■ The oil content of compressed air must remain constant during the life cycle.
■ Use only the approved oils from AVENTICS, see chapter „Technical information“.
■ With oil-free, dry air, other installation positions are possible on request.
■ 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		Hysteresis	Part No.
	psi	psi						
	[psi]	[psi]						
	116	0 / 87	0 - 20	mA	0 - 20	mA	< 0.44 psi	R414000690
	116	0 / 87	4 - 20		4 - 20			R414000691
	174	0 / 145	0 - 20		0 - 20			R414000700
	174	0 / 145	4 - 20		4 - 20			R414000701

Minimum working pressure = 7.25 psi + max. required secondary pressure
Additional pressure setting ranges available on request

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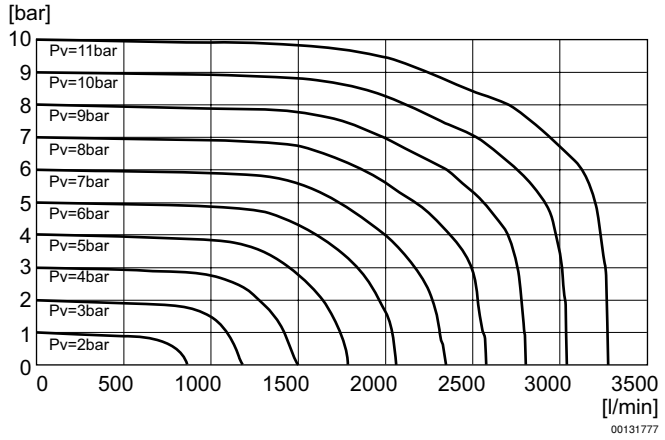
Flow diagram



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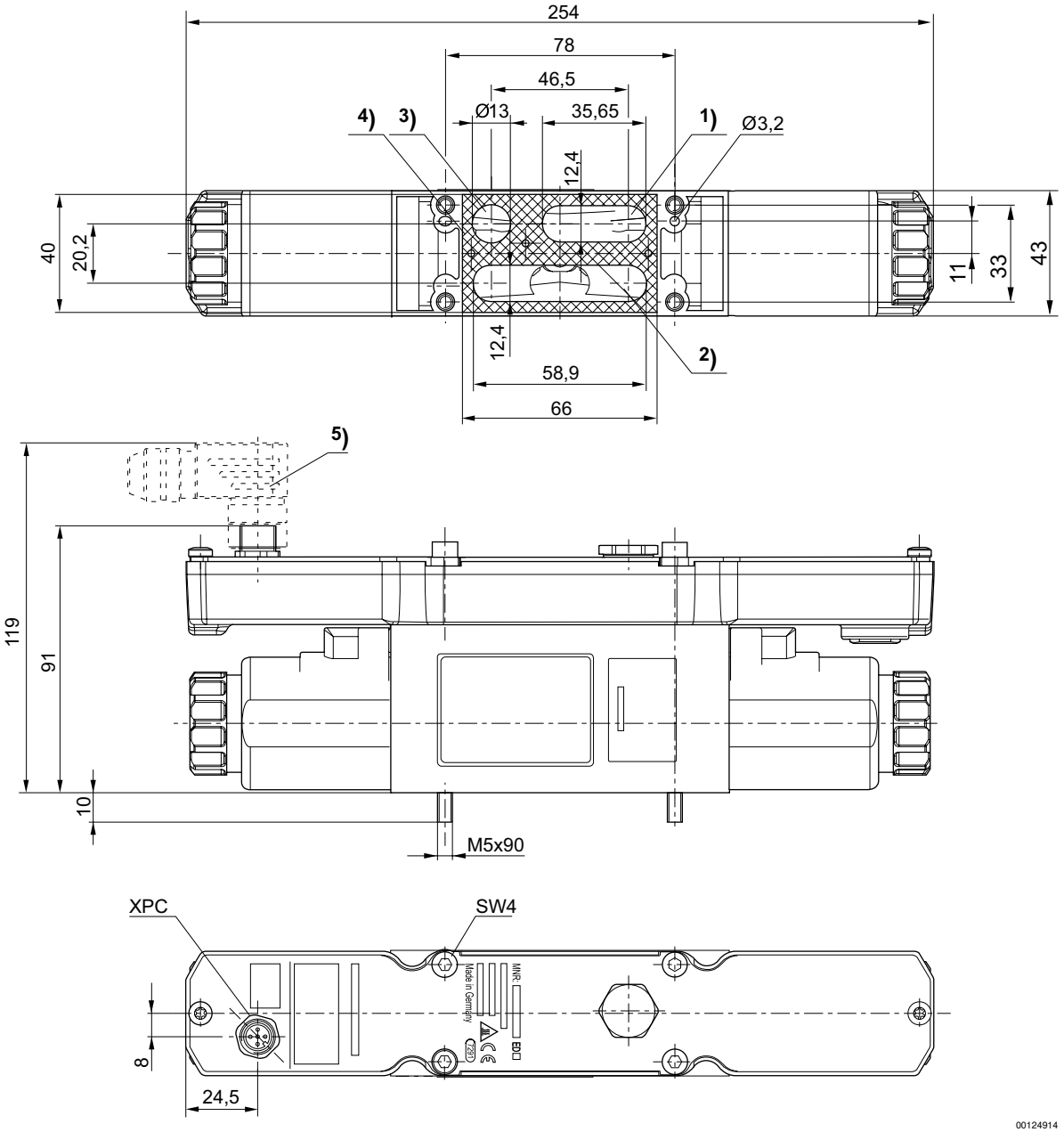
Dimensions



1) Operating pressure
2) Working pressure
3) Exhaust
4) Flat gasket
5) Accessories not supplied

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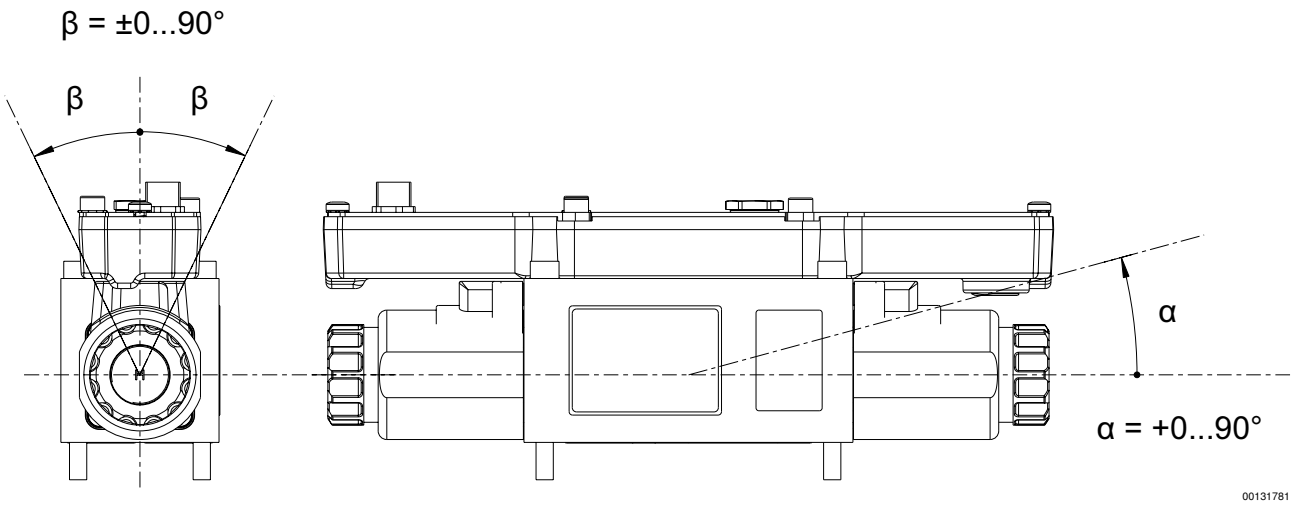
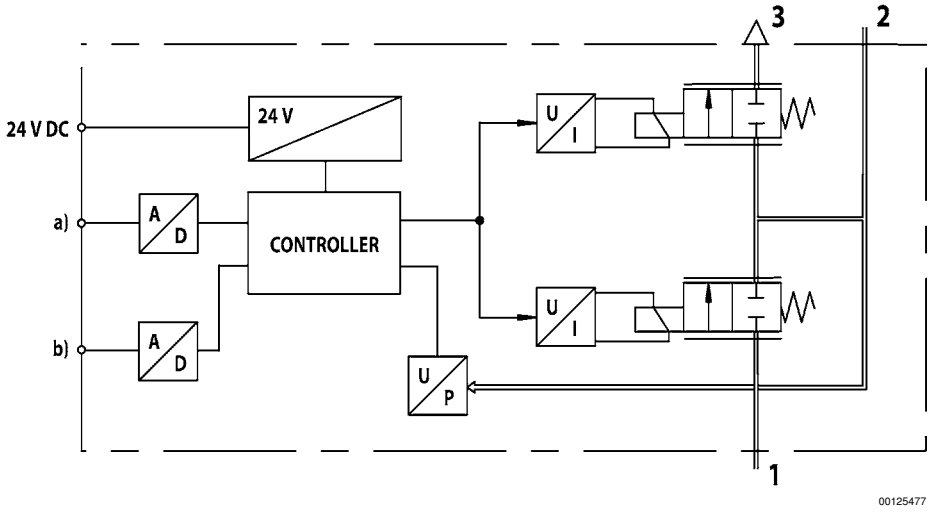
Mounting orientation



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.
1) Operating pressure
2) Working pressure
3) Exhaust

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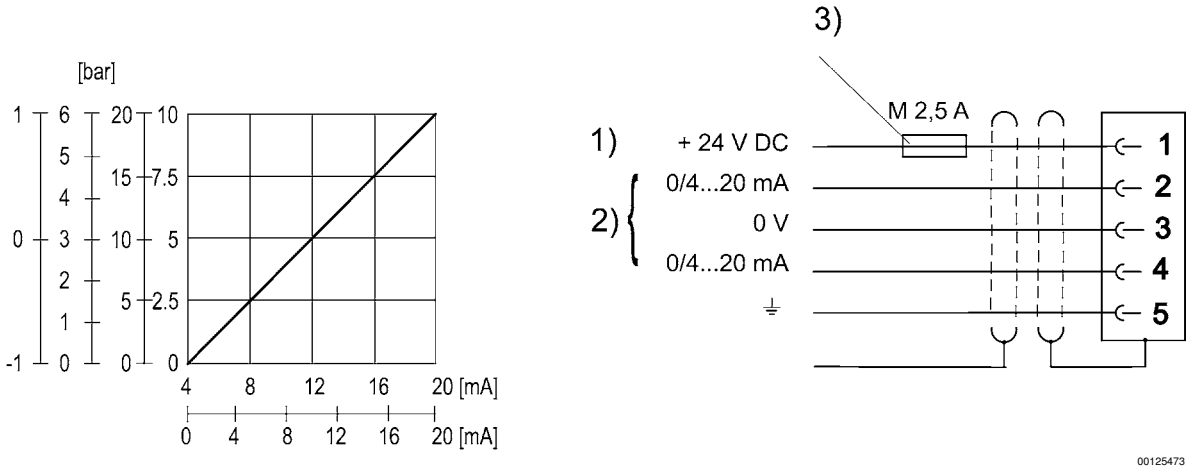
Characteristic and pin assignment for current control with actual output value



1) Supply Voltage
2) Actual value (pin 4) and nominal value (pin 2) are related to 0 V (control voltage).
Nominal input value current (ohmic load 100 Ω). Actual output value (max. total resistance of downstream devices < 300 Ω).
3) The operating voltage must be protected by an external M 2.5 A fuse.
Connect the plug via a shielded cable to ensure EMC.