




# E/P pressure regulator, Series AV05-EP

- For fieldbus connection, Display: LED
- with directional pilot air exhaust



Type	Piloted pressure regulator
Mounting orientation	Any
Working pressure max	11 bar
Ambient temperature min./max.	-10 ... 60 °C
Medium temperature min./max.	-10 ... 60 °C
Medium	Compressed air
Max. particle size	40 µm
Oil content of compressed air	0 ... 5 mg/m³
DC operating voltage	24 V
Voltage tolerance DC	-20% / +30%
Protection class	IP65
Weight	0,19 kg

## Technical data

Part No.		Pressure setting range min./max.	Max. power consumption	Repetitive precision
			mA	
R414007919		0,5 ... 10 bar	180 mA	0.04 bar
R414007421		0,5 ... 10 bar	120 mA	0.04 bar
R414007397		0,5 ... 10 bar	120 mA	0.18 bar

Part No.	Hysteresis	
R414007919	0.05 bar	1)
R414007421	0.05 bar	2)
R414007397	0.2 bar	2)

See diagrams for flow characteristic curve

- 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.

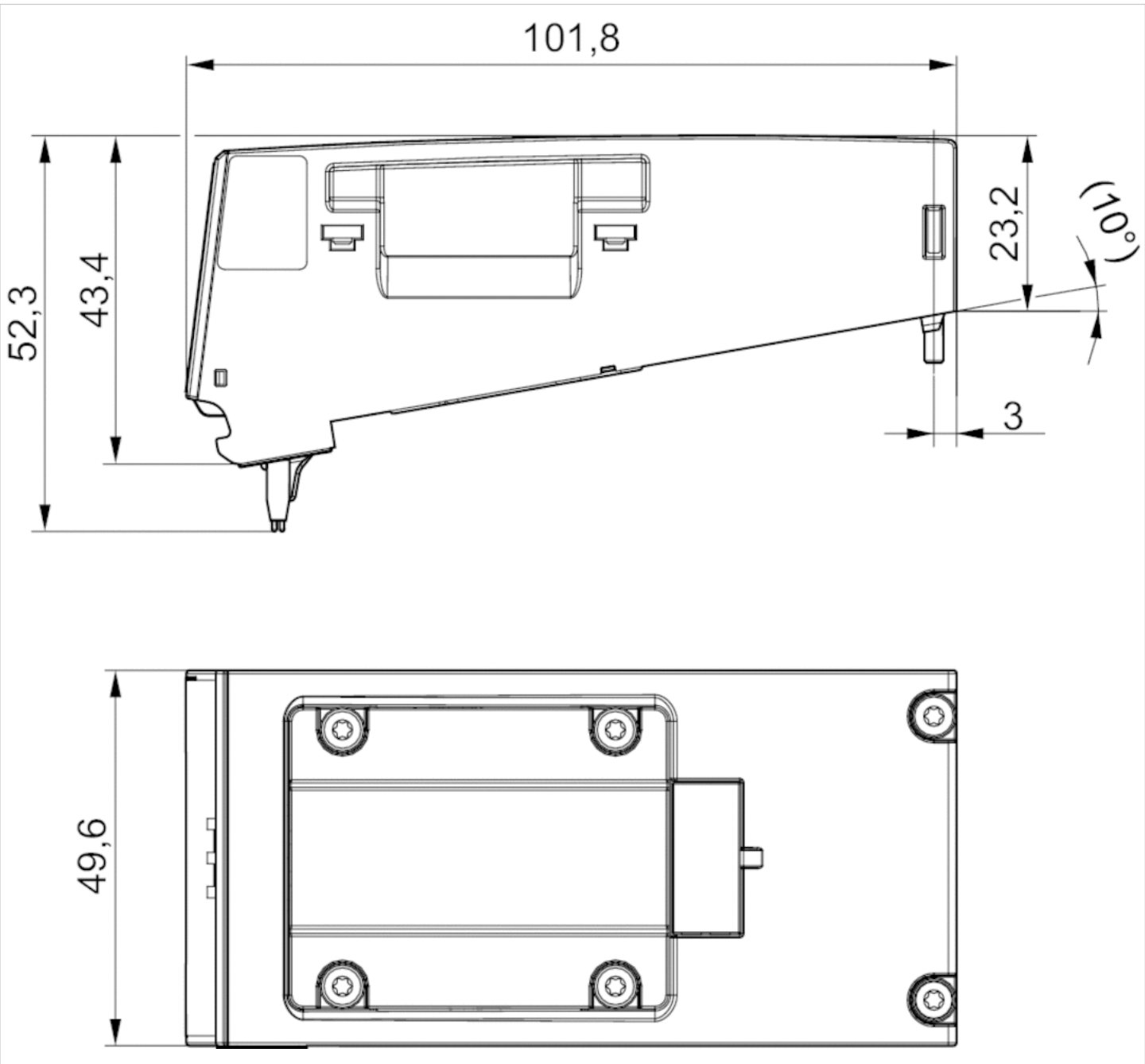
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Housing	Polyarylamide
Seals	Nitrile butadiene rubber

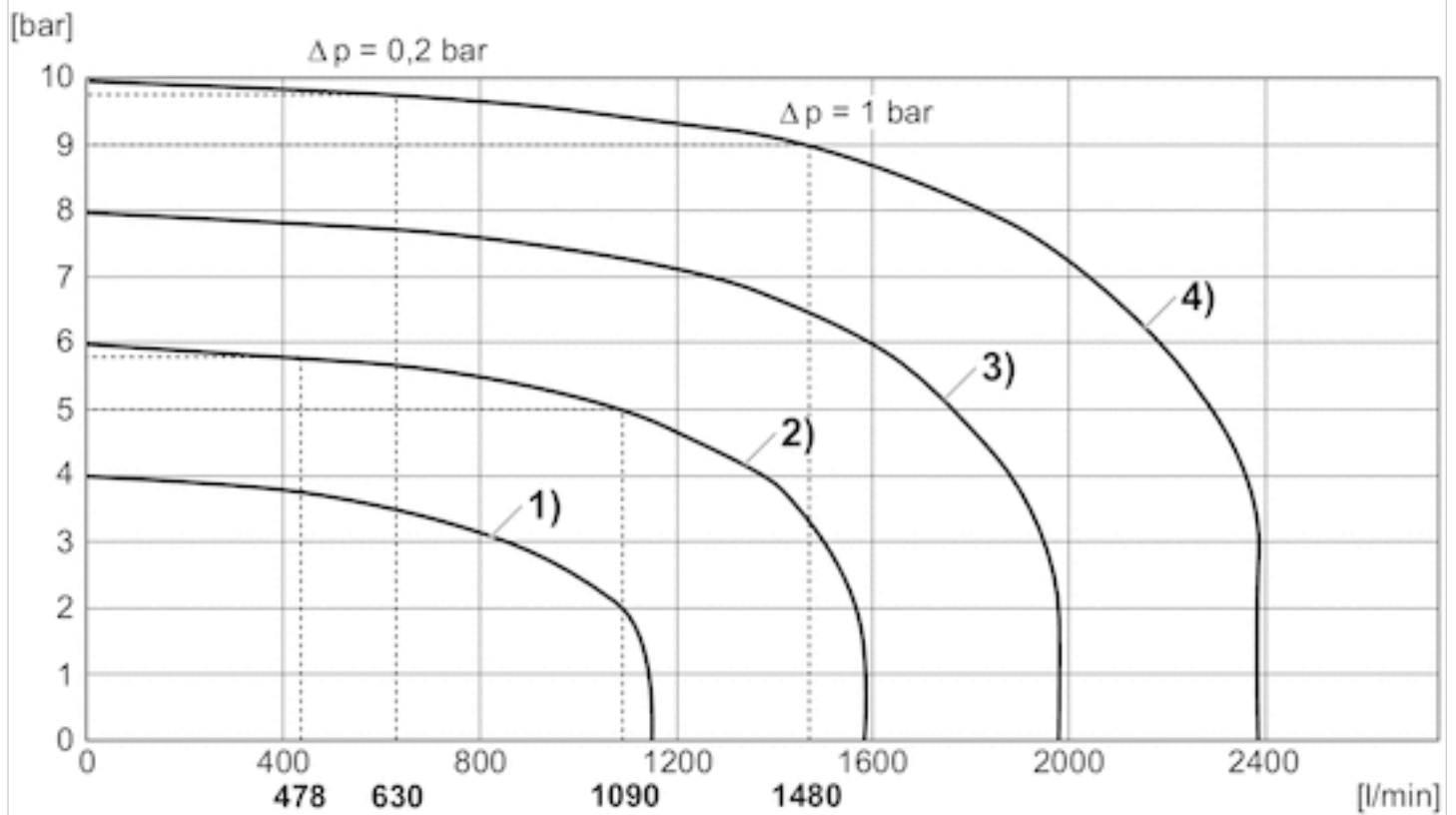
Dimensions

Dimensions



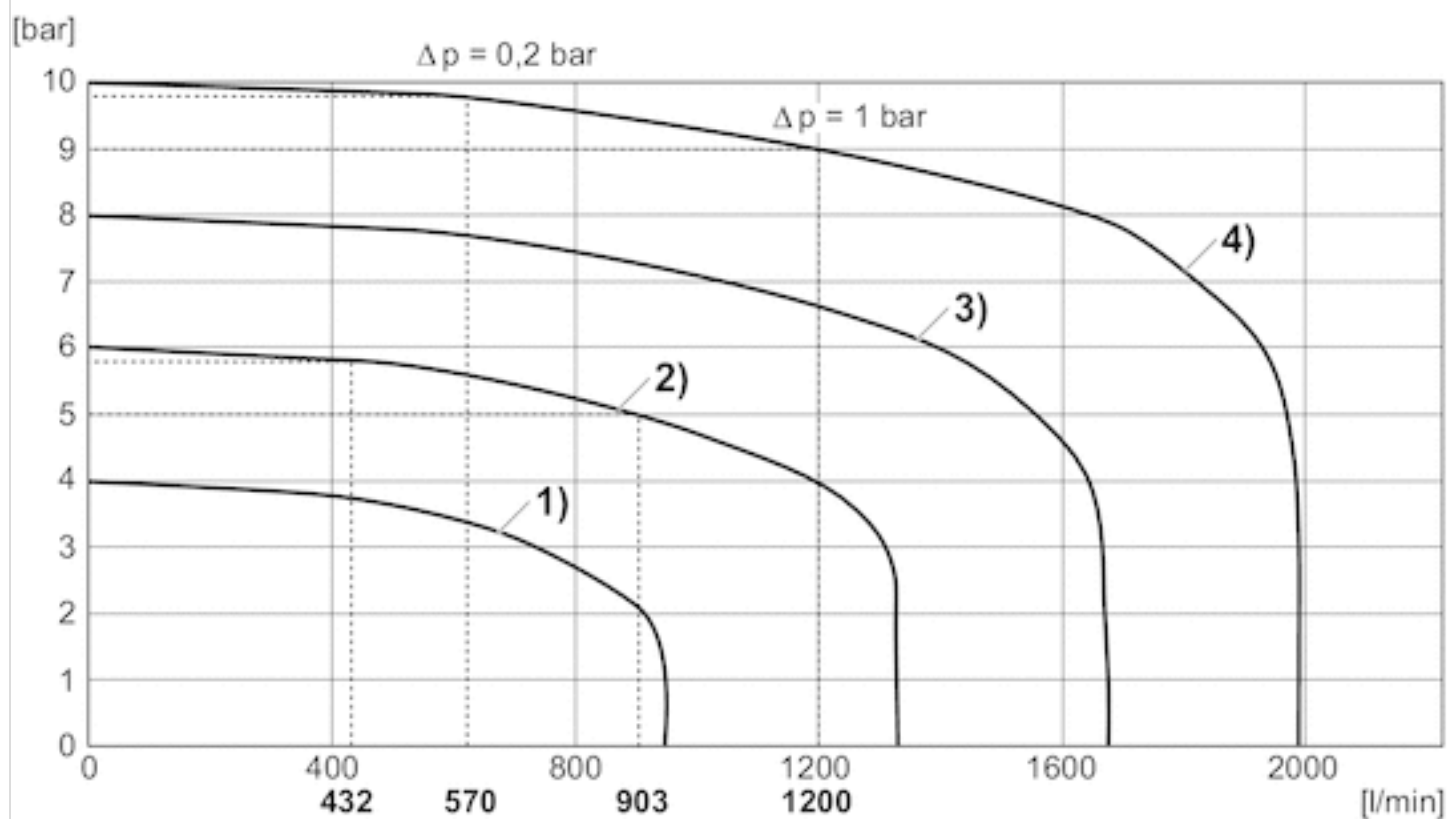
## Diagrams

### Flow characteristic curve, Pressure zone control



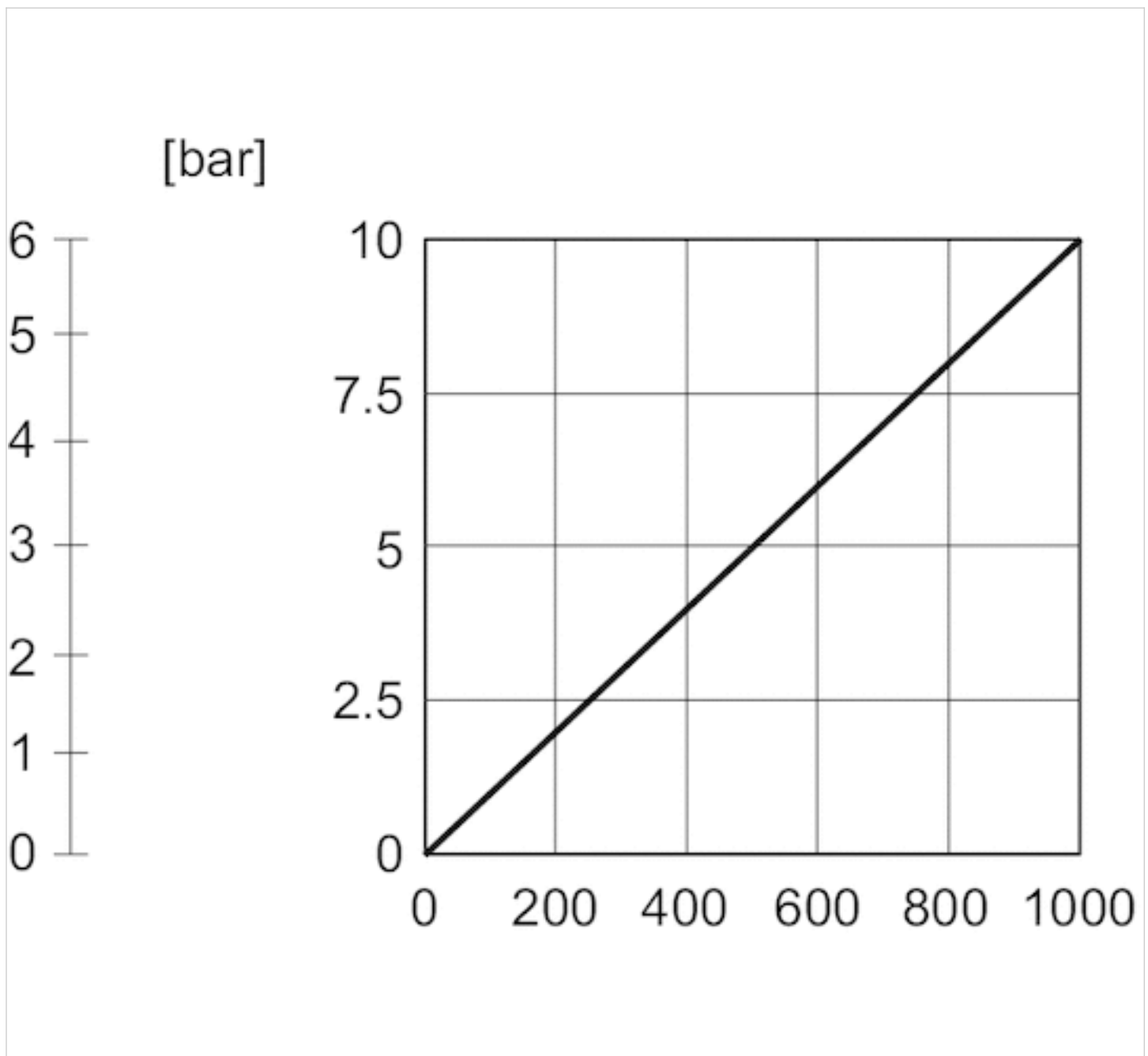
- 1)  $P_v = 5 \text{ bar}$  , controlled: 4 bar
- 2)  $P_v = 7 \text{ bar}$  , controlled: 6 bar
- 3)  $P_v = 9 \text{ bar}$  , controlled: 8 bar
- 4)  $P_v = 11 \text{ bar}$  , controlled: 10 bar

## Flow characteristic curve, Single pressure control



- 1)  $P_v = 5$  bar , controlled: 4 bar
- 2)  $P_v = 7$  bar , controlled: 6 bar
- 3)  $P_v = 9$  bar , controlled: 8 bar
- 4)  $P_v = 11$  bar , controlled: 10 bar

Characteristics, Further information can be found in the operating instructions.



The regulator features a resolution of 10 bits (bit 0 to 9) for the serial nominal value and serial actual value: The nominal value and actual value range for the 10 bar version lies in the range of 0 to 1000 at a resolution of 10 mbar.

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