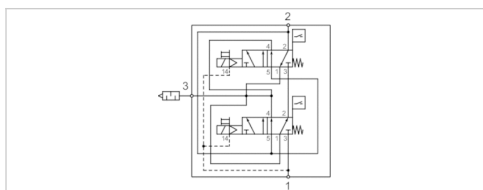


3/2 directional safety valve, Series SV03-AS2

- Safe air supply and exhaust valve compatible with soft-start function
- 3/2
- Compressed air connection output : Ø 13
- single solenoid
- With spring return
- Pilot : Internal



Activation	Electrically
Pilot	Internal
Sealing principle	Soft sealing
Standards	ISO 13849-1, category 4, performance level: e (possible)
Working pressure min./max. Internal	3 ... 10 bar
Working pressure min./max. External	0 ... 10 bar
Control pressure min./max.	3 ... 10 bar
Ambient temperature min./max.	4 ... 50 °C
Medium temperature min./max.	4 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m ³
Nominal flow 1 ► 2	1050 l/min
Nominal flow 2 ► 3	2650 l/min
Connector standard	EN 175301-803, form C
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	30 ms
Typ. switch-off time	70 ms
Type sensor	PNP
Sensor Electrical interface	Plug, M8, 3-pin
Weight	1,9 kg

Technical data

Part No.	Compressed air connection	
	Input	Output
R412027220	Ø 13	Ø 13

Part No.	Compressed air connection	Operational voltage	Voltage tolerance
	Exhaust	DC	DC
R412027220	G 1/2	24 V	-10% / +10%

Part No.	Power consumption	
	DC	
R412027220	1,5 W	

Technical information

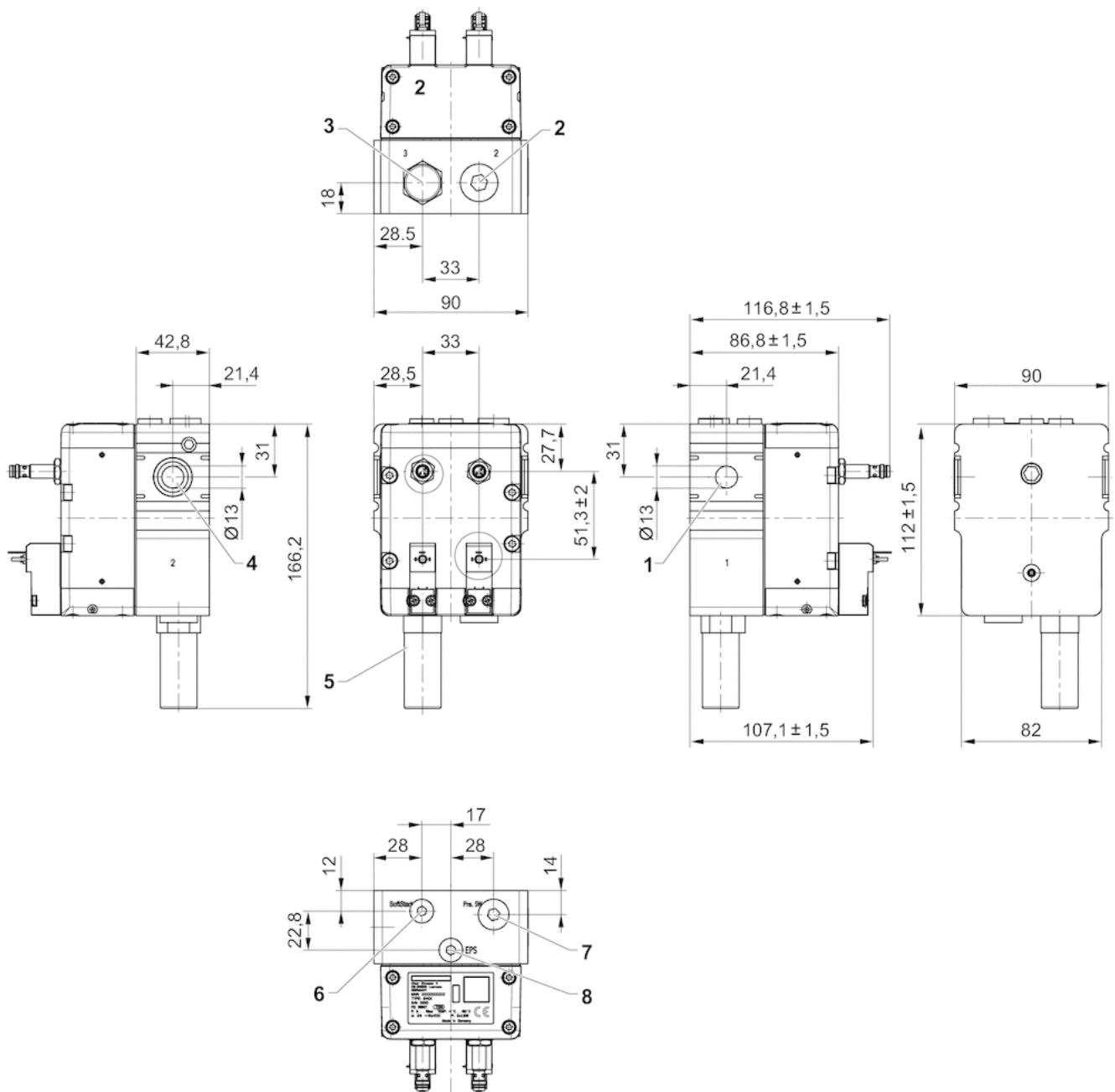
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).
The safety valves are designed in accordance with the requirements listed in ISO 13849-1 and -2. The safety function of the 3/2 safety valve is not only to supply compressed air (pneumatic energy) to the machine/system when the two valve elements are actuated simultaneously, but also to shut off the supply and to exhaust any downstream compressed air when both valves are switched off. A fault in the system where only one valve actuates when switching on or only one de-actuates when switching off prevents air from being supplied downstream and simultaneously exhausts any air that is already downstream. Monitoring of the two proximity sensors by the user’s external safety monitoring system makes it possible to detect these fault situations and to shut off and prevent further electrical energization of the solenoids.

Technical information

Material	
Housing	Die-cast aluminum
Seals	Acrylonitrile butadiene rubber

Dimensions

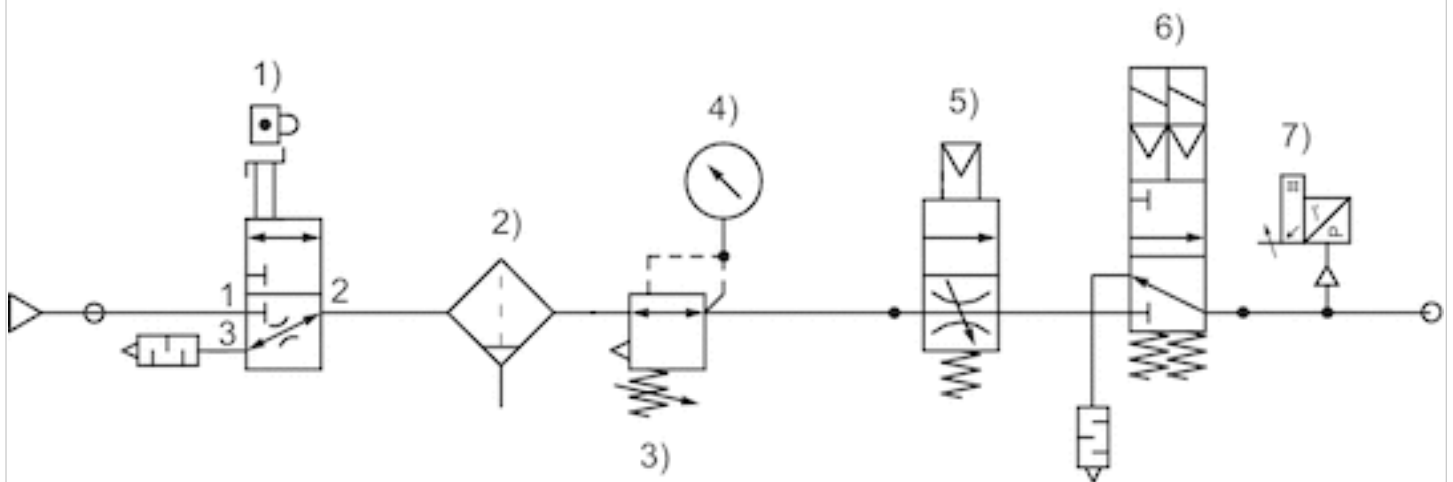
Dimensions



- 1) Port 1 (Input)
- 2) Port 2 (Output)
- 3) Port 3 (Exhaust)
- 4) Flow outlet G 3/8
- 5) Silencer
- 6) Connection for soft start with plug G1/8
- 7) Connection for pressure switch with plug G1/4
- 8) Connection for external pilot supply with plug G1/8

Diagrams

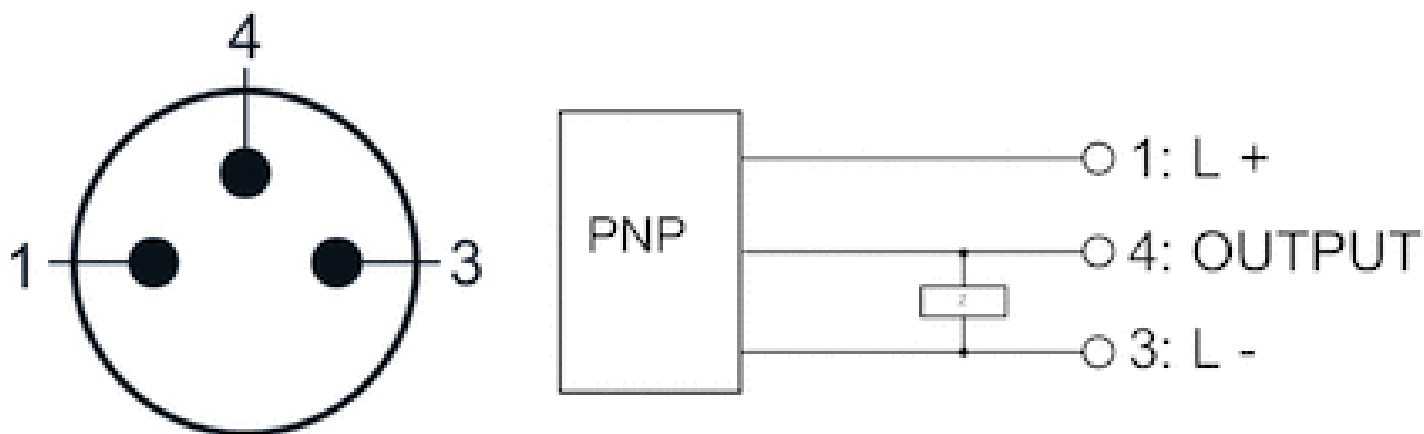
Safe air supply and exhaust valve with soft-start function



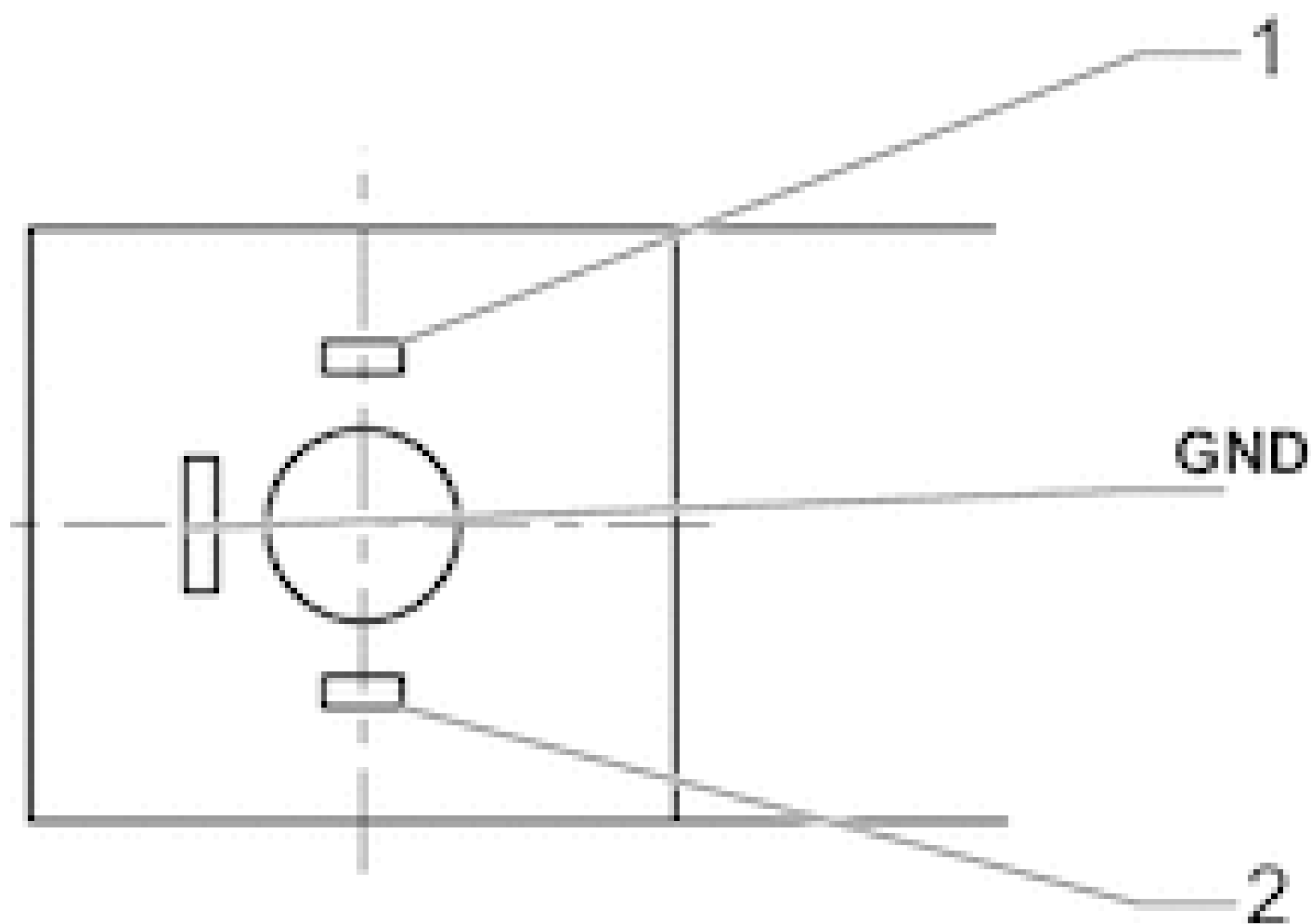
- 1) Lockout valve
- 2) Filter
- 3) Pressure regulator
- 4) Pressure gauge
- 5) Soft-start valve
- 6) Safety exhaust valve SV03-AS2
- 7) Pressure Switches

Pin assignments

PIN assignment sensor, plug M8, 3-pin



Valve plug connector form C



Efficient pneumatic solutions, our program: cylinders and drives, valves and valve systems, air supply management



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