

5/3-directional valve, Series 581, size 2

- ISO 5599-1
- ISO 2
- 5/3
- closed center exhausted center pressurized center
- $Q_n = 2100 \text{ l/min}$
- Compressed air connection output Base plate ISO 5599-1
- Electrical connection Plug, EN 175301-803, form A
- Manual override with detent, without detent



Type	Spool valve
Sealing principle	Soft sealing
Blocking principle	Single base plate principle
Connection type	Plate connection
Standards	ISO 5599-1, ISO 2
Working pressure min./max.	See table below
Control pressure min./max.	3 ... 10 bar
Ambient temperature min./max.	-15 ... 50 °C
Medium temperature min./max.	-15 ... 50 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m ³
Nominal flow Q_n	2100 l/min
Flow conductance C	8,9 l/(s*bar)
Protection class with connection	IP65
Compatibility index	14
Duty cycle	100 %
Typ. switch-on time	17 ms
Typ. switch-off time	36 ms
Mounting screw	with hexagon socket
Mounting screw tightening torque	3,5 Nm
Weight	0,71 kg

Part No.	Operational voltage AC 50 Hz	Voltage tolerance DC	Voltage tolerance AC 50 Hz
5812790650	-	-10% / +10%	-
5812790450	230 V	-	-10% / +10%
5812791650	-	-10% / +10%	-
5812791450	230 V	-	-10% / +10%
5812792650	-	-10% / +10%	-
5812792450	230 V	-	-10% / +10%
5812793650	-	-10% / +10%	-
5812793450	230 V	-	-10% / +10%

Part No.	Power consumption DC	Holding power AC 50 Hz	Switch-on power AC 50 Hz	Pilot
5812490650	2 W	-	-	Internal
5812490450	-	4,8 VA	7 VA	Internal
5812491650	2 W	-	-	Internal
5812491450	-	4,8 VA	7 VA	Internal
5812492650	2 W	-	-	External
5812492450	-	4,8 VA	7 VA	External
5812493650	2 W	-	-	External
5812493450	-	4,8 VA	7 VA	External
5812590650	2 W	-	-	Internal
5812590450	-	4,8 VA	7 VA	Internal
5812591650	2 W	-	-	Internal
5812591450	-	4,8 VA	7 VA	Internal
5812592650	2 W	-	-	External
5812592450	-	4,8 VA	7 VA	External
5812593650	2 W	-	-	External
5812593450	-	4,8 VA	7 VA	External
5812790650	2 W	-	-	Internal
5812790450	-	4,8 VA	7 VA	Internal
5812791650	2 W	-	-	Internal
5812791450	-	4,8 VA	7 VA	Internal
5812792650	2 W	-	-	External
5812792450	-	4,8 VA	7 VA	External
5812793650	2 W	-	-	External
5812793450	-	4,8 VA	7 VA	External

Part No.	Working pressure min./max.	Compatibility index	Electrical connection Pilot valve
5812490650	3 ... 10 bar	14	Plug EN 175301-803, form A
5812490450	3 ... 10 bar	14	Plug EN 175301-803, form A
5812491650	3 ... 10 bar	14	Plug EN 175301-803, form A
5812491450	3 ... 10 bar	14	Plug EN 175301-803, form A
5812492650	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5812492450	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5812493650	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5812493450	-0,95 ... 10 bar	14	Plug EN 175301-803, form A

Part No.	Working pressure min./max.	Compatibility index	Electrical connection Pilot valve
5812590650	3 ... 10 bar	14	Plug EN 175301-803, form A
5812590450	3 ... 10 bar	14	Plug EN 175301-803, form A
5812591650	3 ... 10 bar	14	Plug EN 175301-803, form A
5812591450	3 ... 10 bar	14	Plug EN 175301-803, form A
5812592650	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5812592450	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5812593650	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5812593450	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5812790650	3 ... 10 bar	14	Plug EN 175301-803, form A
5812790450	3 ... 10 bar	14	Plug EN 175301-803, form A
5812791650	3 ... 10 bar	14	Plug EN 175301-803, form A
5812791450	3 ... 10 bar	14	Plug EN 175301-803, form A
5812792650	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5812792450	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5812793650	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5812793450	-0,95 ... 10 bar	14	Plug EN 175301-803, form A

Part No.	Throttle
5812490650	-
5812490450	-
5812491650	with throttle
5812491450	with throttle
5812492650	-
5812492450	-
5812493650	with throttle
5812493450	with throttle
5812590650	-
5812590450	-
5812591650	with throttle
5812591450	with throttle
5812592650	-
5812592450	-
5812593650	with throttle
5812593450	with throttle
5812790650	-
5812790450	-
5812791650	with throttle
5812791450	with throttle
5812792650	-
5812792450	-
5812793650	with throttle
5812793450	with throttle

Nominal flow Q_n at 6 bar and $\Delta p = 1$ bar, MO = Manual override, An operating pressure of up to 16 bar is possible in the version with manual override without detent.

Technical information

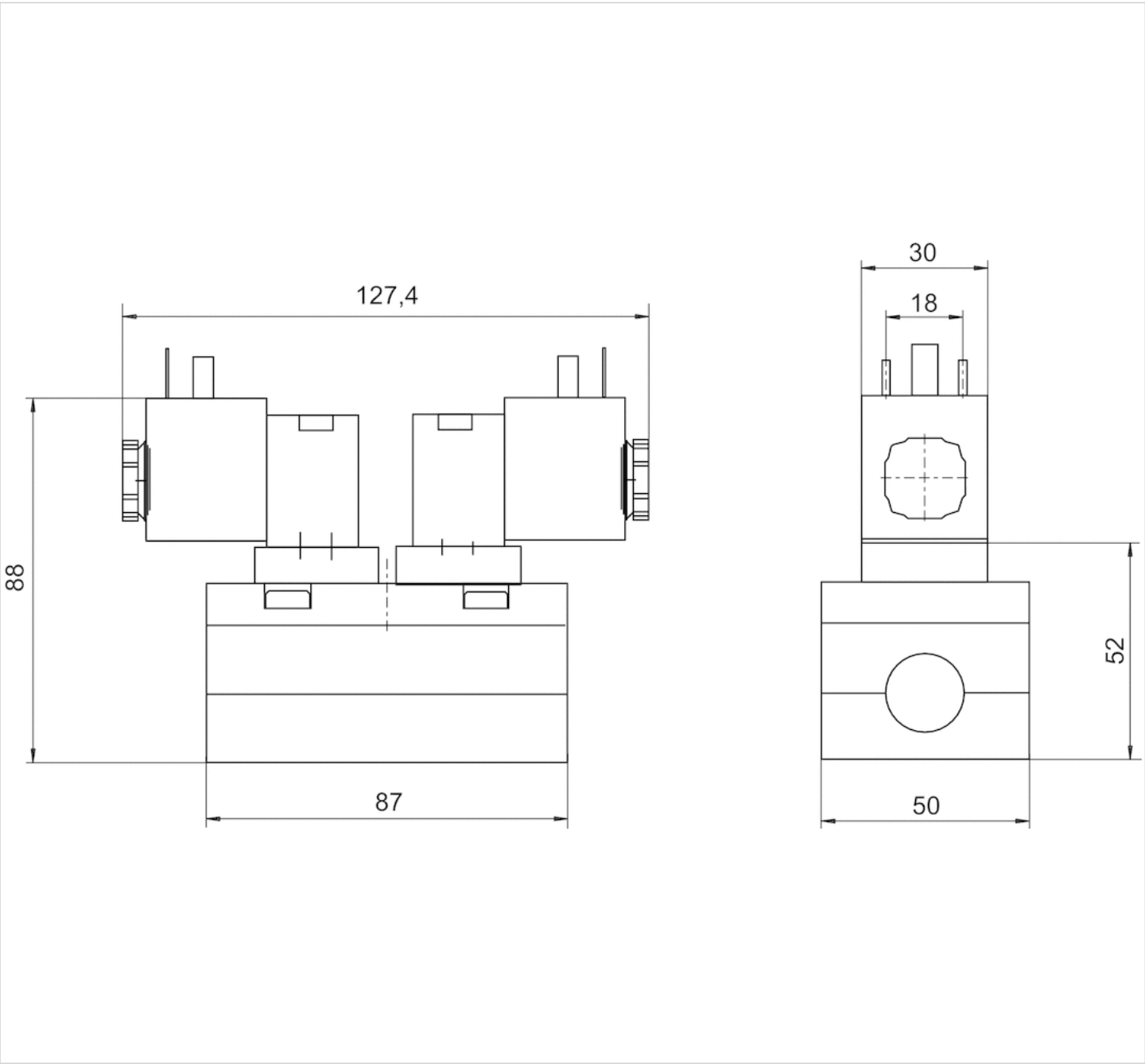
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only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

Technical information

Housing	Aluminum
Seals	Acrylonitrile butadiene rubber

Dimensions

Dimensions



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



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