

5/3-directional valve, Series 581, size 4

- ISO 5599-1
- ISO 4
- 5/3
- closed center exhausted center pressurized center
- $Q_n = 5000 \text{ l/min}$
- 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 4
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	5000 l/min
Flow conductance C	15,5 l/(s*bar)
Protection class with connection	IP65
Compatibility index	14
Duty cycle	100 %
Typ. switch-on time	26 ms
Typ. switch-off time	68 ms
Mounting screw	with hexagon socket
Mounting screw tightening torque	10 Nm
Weight	1,57 kg

Part No.	Operational voltage AC 50 Hz	Voltage tolerance DC	Voltage tolerance AC 50 Hz
5814790650	-	-10% / +10%	-
5814790450	230 V	-	-10% / +10%
5814791650	-	-10% / +10%	-
5814791450	230 V	-	-10% / +10%
5814792650	-	-10% / +10%	-
5814792450	230 V	-	-10% / +10%
5814793650	-	-10% / +10%	-
5814793450	230 V	-	-10% / +10%

Part No.	Power consumption DC	Holding power AC 50 Hz	Switch-on power AC 50 Hz	Pilot
5814490650	2 W	-	-	Internal
5814490450	-	4,8 VA	7 VA	Internal
5814491650	2 W	-	-	Internal
5814491450	-	4,8 VA	7 VA	Internal
5814492650	2 W	-	-	External
5814492450	-	4,8 VA	7 VA	External
5814493650	2 W	-	-	External
5814493450	-	4,8 VA	7 VA	External
5814590650	2 W	-	-	Internal
5814590450	-	4,8 VA	7 VA	Internal
5814591650	2 W	-	-	Internal
5814591450	-	4,8 VA	7 VA	Internal
5814592650	2 W	-	-	External
5814592450	-	4,8 VA	7 VA	External
5814593650	2 W	-	-	External
5814593450	-	4,8 VA	7 VA	External
5814790650	2 W	-	-	Internal
5814790450	-	4,8 VA	7 VA	Internal
5814791650	2 W	-	-	Internal
5814791450	-	4,8 VA	7 VA	Internal
5814792650	2 W	-	-	External
5814792450	-	4,8 VA	7 VA	External
5814793650	2 W	-	-	External
5814793450	-	4,8 VA	7 VA	External

Part No.	Working pressure min./max.	Compatibility index	Electrical connection Pilot valve
5814490650	3 ... 10 bar	14	Plug EN 175301-803, form A
5814490450	3 ... 10 bar	14	Plug EN 175301-803, form A
5814491650	3 ... 10 bar	14	Plug EN 175301-803, form A
5814491450	3 ... 10 bar	14	Plug EN 175301-803, form A
5814492650	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5814492450	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5814493650	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5814493450	-0,95 ... 10 bar	14	Plug EN 175301-803, form A

Part No.	Working pressure min./max.	Compatibility index	Electrical connection Pilot valve
5814590650	3 ... 10 bar	14	Plug EN 175301-803, form A
5814590450	3 ... 10 bar	14	Plug EN 175301-803, form A
5814591650	3 ... 10 bar	14	Plug EN 175301-803, form A
5814591450	3 ... 10 bar	14	Plug EN 175301-803, form A
5814592650	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5814592450	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5814593650	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5814593450	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5814790650	3 ... 10 bar	14	Plug EN 175301-803, form A
5814790450	3 ... 10 bar	14	Plug EN 175301-803, form A
5814791650	3 ... 10 bar	14	Plug EN 175301-803, form A
5814791450	3 ... 10 bar	14	Plug EN 175301-803, form A
5814792650	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5814792450	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5814793650	-0,95 ... 10 bar	14	Plug EN 175301-803, form A
5814793450	-0,95 ... 10 bar	14	Plug EN 175301-803, form A

Part No.	Throttle
5814490650	-
5814490450	-
5814491650	with throttle
5814491450	with throttle
5814492650	-
5814492450	-
5814493650	with throttle
5814493450	with throttle
5814590650	-
5814590450	-
5814591650	with throttle
5814591450	with throttle
5814592650	-
5814592450	-
5814593650	with throttle
5814593450	with throttle
5814790650	-
5814790450	-
5814791650	with throttle
5814791450	with throttle
5814792650	-
5814792450	-
5814793650	with throttle
5814793450	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

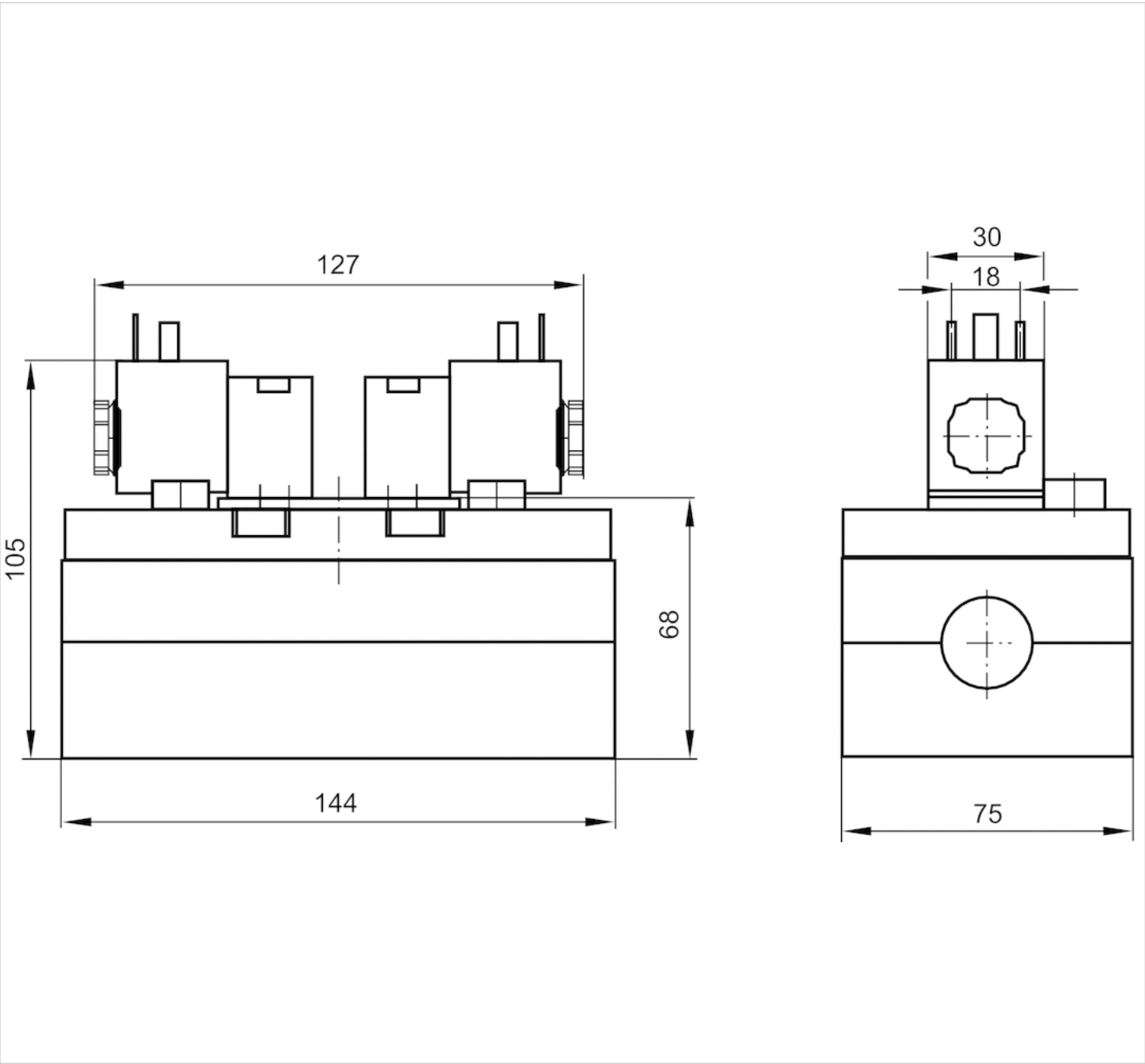
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only 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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