

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

- ISO 5599-1
- ISO 2
- 5/3
- exhausted center
- $Q_n = 2100 \text{ l/min}$
- Compressed air connection output Base plate ISO 5599-1
- Electrical connection Plug, Form B, industry
- Manual override with 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
Duty cycle	100 %
Typ. switch-on time	See table below
Typ. switch-off time	See table below
Mounting screw	with hexagon socket
Mounting screw tightening torque	3,5 Nm
Weight	0,42 kg

Technical data

Part No.		MO		Operational voltage DC
5812520500			exhausted center	12 V
5812520200			exhausted center	-
5812520100			exhausted center	24 V
5812520600			exhausted center	48 V
5812520300			exhausted center	-
5812520400			exhausted center	-
5812520000			exhausted center	-
5812521500			exhausted center	12 V
5812521200			exhausted center	-
5812521100			exhausted center	24 V
5812521600			exhausted center	48 V
5812521300			exhausted center	-
5812521400			exhausted center	-
5812521000			exhausted center	-
5812522500			exhausted center	12 V
5812522200			exhausted center	-
5812522100			exhausted center	24 V
5812522600			exhausted center	48 V
5812522300			exhausted center	-
5812522400			exhausted center	-
5812522000			exhausted center	-
5812523500			exhausted center	12 V
5812523200			exhausted center	-
5812523100			exhausted center	24 V
5812523600			exhausted center	48 V
5812523300			exhausted center	-
5812523400			exhausted center	-
5812523000			exhausted center	-

Part No.	Operational voltage AC 50 Hz	Operational voltage AC 60 Hz	Voltage tolerance DC
5812520500	-	-	-10% / +10%
5812520200	24 V	-	-
5812520100	-	-	-10% / +10%
5812520600	-	-	-10% / +10%
5812520300	-	110 V	-
5812520400	230 V	-	-
5812520000	-	-	-
5812521500	-	-	-10% / +10%
5812521200	24 V	-	-
5812521100	-	-	-10% / +10%
5812521600	-	-	-10% / +10%
5812521300	-	110 V	-

Part No.	Operational voltage AC 50 Hz	Operational voltage AC 60 Hz	Voltage tolerance DC
5812521400	230 V	-	-
5812521000	-	-	-
5812522500	-	-	-10% / +10%
5812522200	24 V	-	-
5812522100	-	-	-10% / +10%
5812522600	-	-	-10% / +10%
5812522300	-	110 V	-
5812522400	230 V	-	-
5812522000	-	-	-
5812523500	-	-	-10% / +10%
5812523200	24 V	-	-
5812523100	-	-	-10% / +10%
5812523600	-	-	-10% / +10%
5812523300	-	110 V	-
5812523400	230 V	-	-
5812523000	-	-	-

Part No.	Voltage tolerance AC 50 Hz	Voltage tolerance AC 60 Hz	Power consumption DC	Holding power AC 50 Hz
5812520500	-	-	5 W	-
5812520200	-10% / +10%	-	-	8 VA
5812520100	-	-	5 W	-
5812520600	-	-	5 W	-
5812520300	-	-10% / +10%	-	-
5812520400	-10% / +10%	-	-	8 VA
5812520000	-	-	-	-
5812521500	-	-	5 W	-
5812521200	-10% / +10%	-	-	8 VA
5812521100	-	-	5 W	-
5812521600	-	-	5 W	-
5812521300	-	-10% / +10%	-	-
5812521400	-10% / +10%	-	-	8 VA
5812521000	-	-	-	-
5812522500	-	-	5 W	-
5812522200	-10% / +10%	-	-	8 VA
5812522100	-	-	5 W	-
5812522600	-	-	5 W	-
5812522300	-	-10% / +10%	-	-
5812522400	-10% / +10%	-	-	8 VA
5812522000	-	-	-	-
5812523500	-	-	5 W	-
5812523200	-10% / +10%	-	-	8 VA
5812523100	-	-	5 W	-
5812523600	-	-	5 W	-
5812523300	-	-10% / +10%	-	-
5812523400	-10% / +10%	-	-	8 VA
5812523000	-	-	-	-

Part No.	Holding power AC 60 Hz	Switch-on power AC 50 Hz	Switch-on power AC 60 Hz	Pilot
5812520500	-	-	-	Internal
5812520200	-	10 VA	-	Internal
5812520100	-	-	-	Internal
5812520600	-	-	-	Internal
5812520300	8 VA	-	10 VA	Internal
5812520400	-	10 VA	-	Internal
5812520000	-	-	-	Internal
5812521500	-	-	-	Internal
5812521200	-	10 VA	-	Internal
5812521100	-	-	-	Internal
5812521600	-	-	-	Internal
5812521300	8 VA	-	10 VA	Internal
5812521400	-	10 VA	-	Internal
5812521000	-	-	-	Internal
5812522500	-	-	-	External
5812522200	-	10 VA	-	External
5812522100	-	-	-	External
5812522600	-	-	-	External
5812522300	8 VA	-	10 VA	External
5812522400	-	10 VA	-	External
5812522000	-	-	-	External
5812523500	-	-	-	External
5812523200	-	10 VA	-	External
5812523100	-	-	-	External
5812523600	-	-	-	External
5812523300	8 VA	-	10 VA	External
5812523400	-	10 VA	-	External
5812523000	-	-	-	External

Part No.	Working pressure min./max.	Typ. switch-on time	Typ. switch-off time
5812520500	3 ... 10 bar	19 ms	42 ms
5812520200	3 ... 10 bar	19 ms	42 ms
5812520100	3 ... 10 bar	19 ms	42 ms
5812520600	3 ... 10 bar	19 ms	42 ms
5812520300	3 ... 10 bar	19 ms	42 ms
5812520400	3 ... 10 bar	19 ms	42 ms
5812520000	3 ... 10 bar	19 ms	42 ms
5812521500	3 ... 10 bar	19 ms	42 ms
5812521200	3 ... 10 bar	19 ms	42 ms
5812521100	3 ... 10 bar	19 ms	42 ms
5812521600	3 ... 10 bar	19 ms	42 ms
5812521300	3 ... 10 bar	19 ms	42 ms
5812521400	3 ... 10 bar	19 ms	42 ms
5812521000	3 ... 10 bar	19 ms	42 ms
5812522500	-0,95 ... 10 bar	30 ms	74 ms
5812522200	-0,95 ... 10 bar	30 ms	74 ms

Part No.	Working pressure min./max.	Typ. switch-on time	Typ. switch-off time
5812522100	-0,95 ... 10 bar	30 ms	74 ms
5812522600	-0,95 ... 10 bar	30 ms	74 ms
5812522300	-0,95 ... 10 bar	30 ms	74 ms
5812522400	-0,95 ... 10 bar	30 ms	74 ms
5812522000	-0,95 ... 10 bar	30 ms	74 ms
5812523500	-0,95 ... 10 bar	30 ms	74 ms
5812523200	-0,95 ... 10 bar	30 ms	74 ms
5812523100	-0,95 ... 10 bar	30 ms	74 ms
5812523600	-0,95 ... 10 bar	30 ms	74 ms
5812523300	-0,95 ... 10 bar	30 ms	74 ms
5812523400	-0,95 ... 10 bar	30 ms	74 ms
5812523000	-0,95 ... 10 bar	30 ms	74 ms

Part No.	Electrical connection Pilot valve	basic valve with electrical connector	Throttle
5812520500	Plug Form B, industry	-	-
5812520200	Plug Form B, industry	-	-
5812520100	Plug Form B, industry	-	-
5812520600	Plug Form B, industry	-	-
5812520300	Plug Form B, industry	-	-
5812520400	Plug Form B, industry	-	-
5812520000	Plug Form B, industry	Basic valve without coil	-
5812521500	Plug Form B, industry	-	with throttle
5812521200	Plug Form B, industry	-	with throttle
5812521100	Plug Form B, industry	-	with throttle
5812521600	Plug Form B, industry	-	with throttle
5812521300	Plug Form B, industry	-	with throttle
5812521400	Plug Form B, industry	-	with throttle
5812521000	Plug Form B, industry	Basic valve without coil	with throttle
5812522500	Plug Form B, industry	-	-
5812522200	Plug Form B, industry	-	-
5812522100	Plug Form B, industry	-	-
5812522600	Plug Form B, industry	-	-
5812522300	Plug Form B, industry	-	-
5812522400	Plug Form B, industry	-	-
5812522000	Plug Form B, industry	Basic valve without coil	-
5812523500	Plug Form B, industry	-	with throttle
5812523200	Plug Form B, industry	-	with throttle
5812523100	Plug Form B, industry	-	with throttle
5812523600	Plug Form B, industry	-	with throttle
5812523300	Plug Form B, industry	-	with throttle
5812523400	Plug Form B, industry	-	with throttle
5812523000	Plug Form B, industry	Basic valve without coil	with throttle

Nominal flow Q_n at 6 bar and Δp = 1 bar, MO = Manual override

Technical information

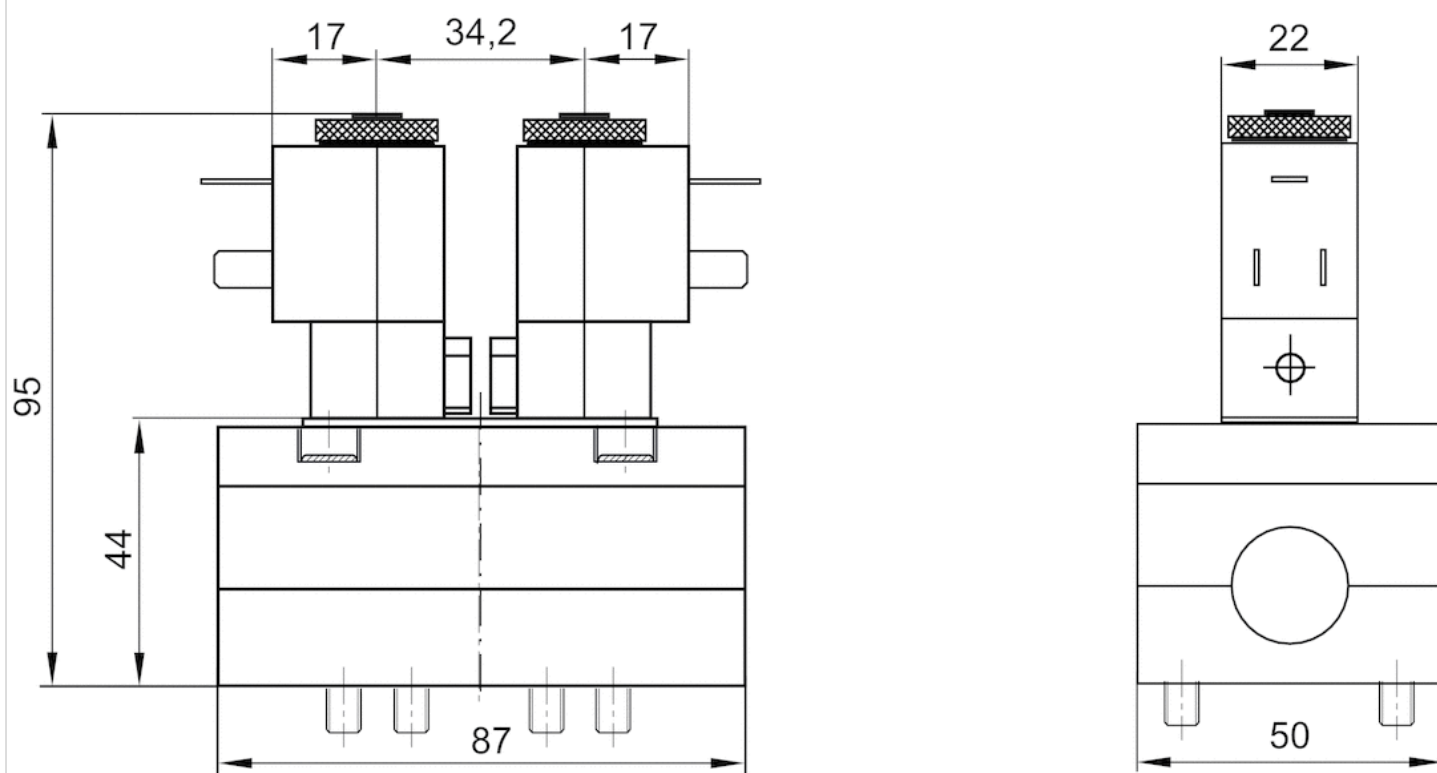
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only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

Technical information

Housing	Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber

Dimensions

Dimensions



The pilot valves can be loosened and turned through 180°.