

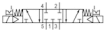
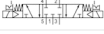
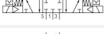
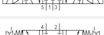
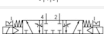
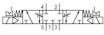
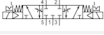
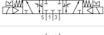
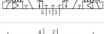
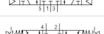
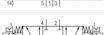
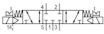
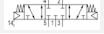
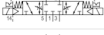
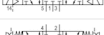
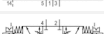
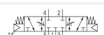
5/3-directional valve, Series 581, size 2

- ISO 5599-1
- ISO 2
- 5/3
- closed 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	19 ms
Typ. switch-off time	42 ms
Mounting screw	with hexagon socket
Mounting screw tightening torque	3,5 Nm
Weight	0,42 kg

Technical data

Part No.		MO		Operational voltage DC
5812420500			closed center	12 V
5812420200			closed center	-
5812420100			closed center	24 V
5812420600			closed center	48 V
5812420300			closed center	-
5812420400			closed center	-
5812420000			closed center	-
5812421500			closed center	12 V
5812421200			closed center	-
5812421100			closed center	24 V
5812421600			closed center	48 V
5812421300			closed center	-
5812421400			closed center	-
5812421000			closed center	-
5812422500			closed center	12 V
5812422200			closed center	-
5812422600			closed center	48 V
5812422300			closed center	-
5812422400			closed center	-
5812422000			closed center	-
5812423500			closed center	12 V
5812423200			closed center	-
5812423100			closed center	24 V
5812423600			closed center	48 V
5812423300			closed center	-
5812423400			closed center	-
5812423000			closed center	-

Part No.	Operational voltage AC 50 Hz	Operational voltage AC 60 Hz	Voltage tolerance DC
5812420500	-	-	-10% / +10%
5812420200	24 V	-	-
5812420100	-	-	-10% / +10%
5812420600	-	-	-10% / +10%
5812420300	-	110 V	-
5812420400	230 V	-	-
5812420000	-	-	-
5812421500	-	-	-10% / +10%
5812421200	24 V	-	-
5812421100	-	-	-10% / +10%
5812421600	-	-	-10% / +10%
5812421300	-	110 V	-
5812421400	230 V	-	-

Part No.	Operational voltage AC 50 Hz	Operational voltage AC 60 Hz	Voltage tolerance DC
5812421000	-	-	-
5812422500	-	-	-10% / +10%
5812422200	24 V	-	-
5812422600	-	-	-10% / +10%
5812422300	-	110 V	-
5812422400	230 V	-	-
5812422000	-	-	-
5812423500	-	-	-10% / +10%
5812423200	24 V	-	-
5812423100	-	-	-10% / +10%
5812423600	-	-	-10% / +10%
5812423300	-	110 V	-
5812423400	230 V	-	-
5812423000	-	-	-

Part No.	Voltage tolerance AC 50 Hz	Voltage tolerance AC 60 Hz	Power consumption DC	Holding power AC 50 Hz
5812420500	-	-	5 W	-
5812420200	-10% / +10%	-	-	8 VA
5812420100	-	-	5 W	-
5812420600	-	-	5 W	-
5812420300	-	-10% / +10%	-	-
5812420400	-10% / +10%	-	-	8 VA
5812420000	-	-	-	-
5812421500	-	-	5 W	-
5812421200	-10% / +10%	-	-	8 VA
5812421100	-	-	5 W	-
5812421600	-	-	5 W	-
5812421300	-	-10% / +10%	-	-
5812421400	-10% / +10%	-	-	8 VA
5812421000	-	-	-	-
5812422500	-	-	5 W	-
5812422200	-10% / +10%	-	-	8 VA
5812422600	-	-	5 W	-
5812422300	-	-10% / +10%	-	-
5812422400	-10% / +10%	-	-	8 VA
5812422000	-	-	-	-
5812423500	-	-	5 W	-
5812423200	-10% / +10%	-	-	8 VA
5812423100	-	-	5 W	-
5812423600	-	-	5 W	-
5812423300	-	-10% / +10%	-	-
5812423400	-10% / +10%	-	-	8 VA
5812423000	-	-	-	-

Part No.	Holding power AC 60 Hz	Switch-on power AC 50 Hz	Switch-on power AC 60 Hz	Pilot
5812420500	-	-	-	Internal
5812420200	-	10 VA	-	Internal
5812420100	-	-	-	Internal
5812420600	-	-	-	Internal
5812420300	8 VA	-	10 VA	Internal
5812420400	-	10 VA	-	Internal
5812420000	-	-	-	Internal
5812421500	-	-	-	Internal
5812421200	-	10 VA	-	Internal
5812421100	-	-	-	Internal
5812421600	-	-	-	Internal
5812421300	8 VA	-	10 VA	Internal
5812421400	-	10 VA	-	Internal
5812421000	-	-	-	Internal
5812422500	-	-	-	External
5812422200	-	10 VA	-	External
5812422600	-	-	-	External
5812422300	8 VA	-	10 VA	External
5812422400	-	10 VA	-	External
5812422000	-	-	-	External
5812423500	-	-	-	External
5812423200	-	10 VA	-	External
5812423100	-	-	-	External
5812423600	-	-	-	External
5812423300	8 VA	-	10 VA	External
5812423400	-	10 VA	-	External
5812423000	-	-	-	External

Part No.	Working pressure min./max.	Electrical connection Pilot valve
5812420500	3 ... 10 bar	Plug Form B, industry
5812420200	3 ... 10 bar	Plug Form B, industry
5812420100	3 ... 10 bar	Plug Form B, industry
5812420600	3 ... 10 bar	Plug Form B, industry
5812420300	3 ... 10 bar	Plug Form B, industry
5812420400	3 ... 10 bar	Plug Form B, industry
5812420000	3 ... 10 bar	Plug Form B, industry
5812421500	3 ... 10 bar	Plug Form B, industry
5812421200	3 ... 10 bar	Plug Form B, industry
5812421100	3 ... 10 bar	Plug Form B, industry
5812421600	3 ... 10 bar	Plug Form B, industry
5812421300	3 ... 10 bar	Plug Form B, industry
5812421400	3 ... 10 bar	Plug Form B, industry
5812421000	3 ... 10 bar	Plug Form B, industry
5812422500	-0,95 ... 10 bar	Plug Form B, industry
5812422200	-0,95 ... 10 bar	Plug Form B, industry
5812422600	-0,95 ... 10 bar	Plug Form B, industry

Part No.	Working pressure min./max.	Electrical connection Pilot valve
5812422300	-0,95 ... 10 bar	Plug Form B, industry
5812422400	-0,95 ... 10 bar	Plug Form B, industry
5812422000	-0,95 ... 10 bar	Plug Form B, industry
5812423500	-0,95 ... 10 bar	Plug Form B, industry
5812423200	-0,95 ... 10 bar	Plug Form B, industry
5812423100	-0,95 ... 10 bar	Plug Form B, industry
5812423600	-0,95 ... 10 bar	Plug Form B, industry
5812423300	-0,95 ... 10 bar	Plug Form B, industry
5812423400	-0,95 ... 10 bar	Plug Form B, industry
5812423000	-0,95 ... 10 bar	Plug Form B, industry

Part No.	basic valve with electrical connector	Throttle
5812420500	-	-
5812420200	-	-
5812420100	-	-
5812420600	-	-
5812420300	-	-
5812420400	-	-
5812420000	Basic valve without coil	-
5812421500	-	with throttle
5812421200	-	with throttle
5812421100	-	with throttle
5812421600	-	with throttle
5812421300	-	with throttle
5812421400	-	with throttle
5812421000	Basic valve without coil	with throttle
5812422500	-	-
5812422200	-	-
5812422600	-	-
5812422300	-	-
5812422400	-	-
5812422000	Basic valve without coil	-
5812423500	-	with throttle
5812423200	-	with throttle
5812423100	-	with throttle
5812423600	-	with throttle
5812423300	-	with throttle
5812423400	-	with throttle
5812423000	Basic valve without coil	with throttle

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

Technical information

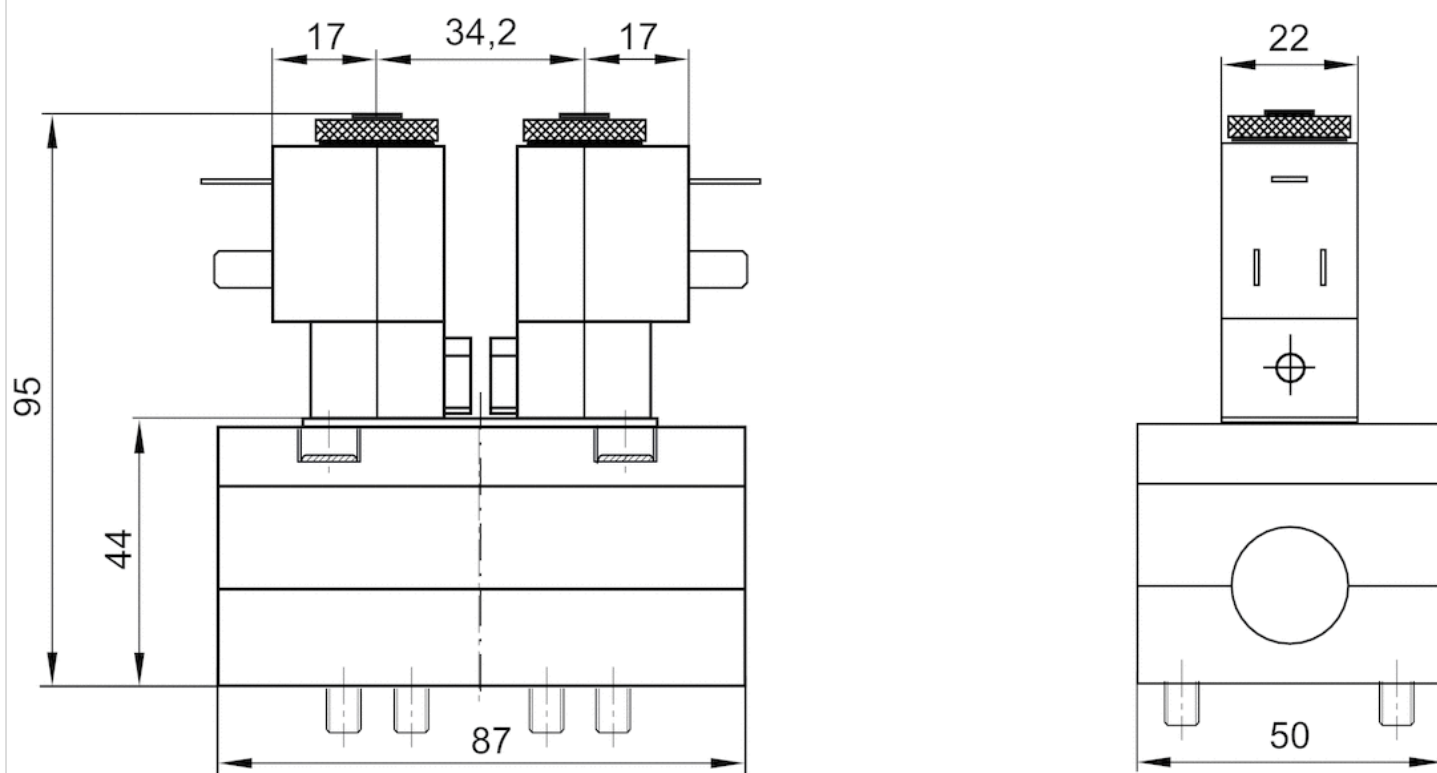
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The oil content of compressed air must remain constant during the life cycle.
Use only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