

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

- ISO 5599-1
- ISO 3
- 5/2
- double solenoid
- $Q_n = 4800 \text{ l/min}$
- 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 3
Working pressure min./max.	See table below
Control pressure min./max.	1,5 ... 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	4800 l/min
Flow conductance C	18,9 l/(s*bar)
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	14 ms
Typ. switch-off time	14 ms
Mounting screw	with hexagon socket
Mounting screw tightening torque	10 Nm
Weight	1,01 kg

Technical data

Part No.		MO	Operational voltage DC	Operational voltage AC 50 Hz
5813220500			12 V	-
5813220200			-	24 V
5813220100			24 V	-
5813220600			48 V	-
5813220300			-	-
5813220400			-	230 V
5813220000			-	-
5813221500			12 V	-
5813221200			-	24 V
5813221100			24 V	-
5813221600			48 V	-
5813221300			-	-
5813221400			-	230 V
5813221000			-	-
5813222500			12 V	-
5813222200			-	24 V
5813222100			24 V	-
5813222600			48 V	-
5813222300			-	-
5813222400			-	230 V
5813222000			-	-
5813223500			12 V	-
5813223200			-	24 V
5813223100			24 V	-
5813223600			48 V	-
5813223300			-	-
5813223400			-	230 V
5813223000			-	-

Part No.	Operational voltage AC 60 Hz	Voltage tolerance DC	Voltage tolerance AC 50 Hz	Voltage tolerance AC 60 Hz
5813220500	-	-10% / +10%	-	-
5813220200	-	-	-10% / +10%	-
5813220100	-	-10% / +10%	-	-
5813220600	-	-10% / +10%	-	-
5813220300	110 V	-	-	-10% / +10%
5813220400	-	-	-10% / +10%	-
5813220000	-	-	-10% / +10%	-
5813221500	-	-10% / +10%	-	-
5813221200	-	-	-10% / +10%	-
5813221100	-	-10% / +10%	-	-
5813221600	-	-10% / +10%	-	-
5813221300	110 V	-	-	-10% / +10%

Part No.	Operational voltage AC 60 Hz	Voltage tolerance DC	Voltage tolerance AC 50 Hz	Voltage tolerance AC 60 Hz
5813221400	-	-	-10% / +10%	-
5813221000	-	-	-10% / +10%	-
5813222500	-	-10% / +10%	-	-
5813222200	-	-	-10% / +10%	-
5813222100	-	-10% / +10%	-	-
5813222600	-	-10% / +10%	-	-
5813222300	110 V	-	-	-10% / +10%
5813222400	-	-	-10% / +10%	-
5813222000	-	-	-10% / +10%	-
5813223500	-	-10% / +10%	-	-
5813223200	-	-	-10% / +10%	-
5813223100	-	-10% / +10%	-	-
5813223600	-	-10% / +10%	-	-
5813223300	110 V	-	-	-10% / +10%
5813223400	-	-	-10% / +10%	-
5813223000	-	-	-10% / +10%	-

Part No.	Power consumption DC	Holding power AC 50 Hz	Holding power AC 60 Hz	Switch-on power AC 50 Hz
5813220500	5 W	-	-	-
5813220200	-	8 VA	-	10 VA
5813220100	5 W	-	-	-
5813220600	5 W	-	-	-
5813220300	-	-	8 VA	-
5813220400	-	8 VA	-	10 VA
5813220000	-	-	-	-
5813221500	5 W	-	-	-
5813221200	-	8 VA	-	10 VA
5813221100	5 W	-	-	-
5813221600	5 W	-	-	-
5813221300	-	-	8 VA	-
5813221400	-	8 VA	-	10 VA
5813221000	-	-	-	-
5813222500	5 W	-	-	-
5813222200	-	8 VA	-	10 VA
5813222100	5 W	-	-	-
5813222600	5 W	-	-	-
5813222300	-	-	8 VA	-
5813222400	-	8 VA	-	10 VA
5813222000	-	-	-	-
5813223500	5 W	-	-	-
5813223200	-	8 VA	-	10 VA
5813223100	5 W	-	-	-
5813223600	5 W	-	-	-
5813223300	-	-	8 VA	-
5813223400	-	8 VA	-	10 VA
5813223000	-	-	-	-

Part No.	Switch-on power AC 60 Hz	Pilot	Working pressure min./max.	Electrical connection Pilot valve
5813220500	-	Internal	1,5 ... 10 bar	Plug Form B, industry
5813220200	-	Internal	1,5 ... 10 bar	Plug Form B, industry
5813220100	-	Internal	1,5 ... 10 bar	Plug Form B, industry
5813220600	-	Internal	1,5 ... 10 bar	Plug Form B, industry
5813220300	10 VA	Internal	1,5 ... 10 bar	Plug Form B, industry
5813220400	-	Internal	1,5 ... 10 bar	Plug Form B, industry
5813220000	-	Internal	1,5 ... 10 bar	Plug Form B, industry
5813221500	-	Internal	1,5 ... 10 bar	Plug Form B, industry
5813221200	-	Internal	1,5 ... 10 bar	Plug Form B, industry
5813221100	-	Internal	1,5 ... 10 bar	Plug Form B, industry
5813221600	-	Internal	1,5 ... 10 bar	Plug Form B, industry
5813221300	10 VA	Internal	1,5 ... 10 bar	Plug Form B, industry
5813221400	-	Internal	1,5 ... 10 bar	Plug Form B, industry
5813221000	-	Internal	1,5 ... 10 bar	Plug Form B, industry
5813222500	-	External	-0,95 ... 10 bar	Plug Form B, industry
5813222200	-	External	-0,95 ... 10 bar	Plug Form B, industry
5813222100	-	External	-0,95 ... 10 bar	Plug Form B, industry
5813222600	-	External	-0,95 ... 10 bar	Plug Form B, industry
5813222300	10 VA	External	-0,95 ... 10 bar	Plug Form B, industry
5813222400	-	External	-0,95 ... 10 bar	Plug Form B, industry
5813222000	-	External	-0,95 ... 10 bar	Plug Form B, industry
5813223500	-	External	-0,95 ... 10 bar	Plug Form B, industry
5813223200	-	External	-0,95 ... 10 bar	Plug Form B, industry
5813223100	-	External	-0,95 ... 10 bar	Plug Form B, industry
5813223600	-	External	-0,95 ... 10 bar	Plug Form B, industry
5813223300	10 VA	External	-0,95 ... 10 bar	Plug Form B, industry
5813223400	-	External	-0,95 ... 10 bar	Plug Form B, industry
5813223000	-	External	-0,95 ... 10 bar	Plug Form B, industry

Part No.	basic valve with electrical connector	Throttle
5813220500	-	-
5813220200	-	-
5813220100	-	-
5813220600	-	-
5813220300	-	-
5813220400	-	-
5813220000	Basic valve without coil	-
5813221500	-	with throttle
5813221200	-	with throttle
5813221100	-	with throttle
5813221600	-	with throttle
5813221300	-	with throttle
5813221400	-	with throttle
5813221000	Basic valve without coil	with throttle
5813222500	-	-
5813222200	-	-

Part No.	basic valve with electrical connector	Throttle
5813222100	-	-
5813222600	-	-
5813222300	-	-
5813222400	-	-
5813222000	Basic valve without coil	-
5813223500	-	with throttle
5813223200	-	with throttle
5813223100	-	with throttle
5813223600	-	with throttle
5813223300	-	with throttle
5813223400	-	with throttle
5813223000	Basic valve without coil	with throttle

Nominal flow Q_n at 6 bar and $\Delta p = 1$ 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.

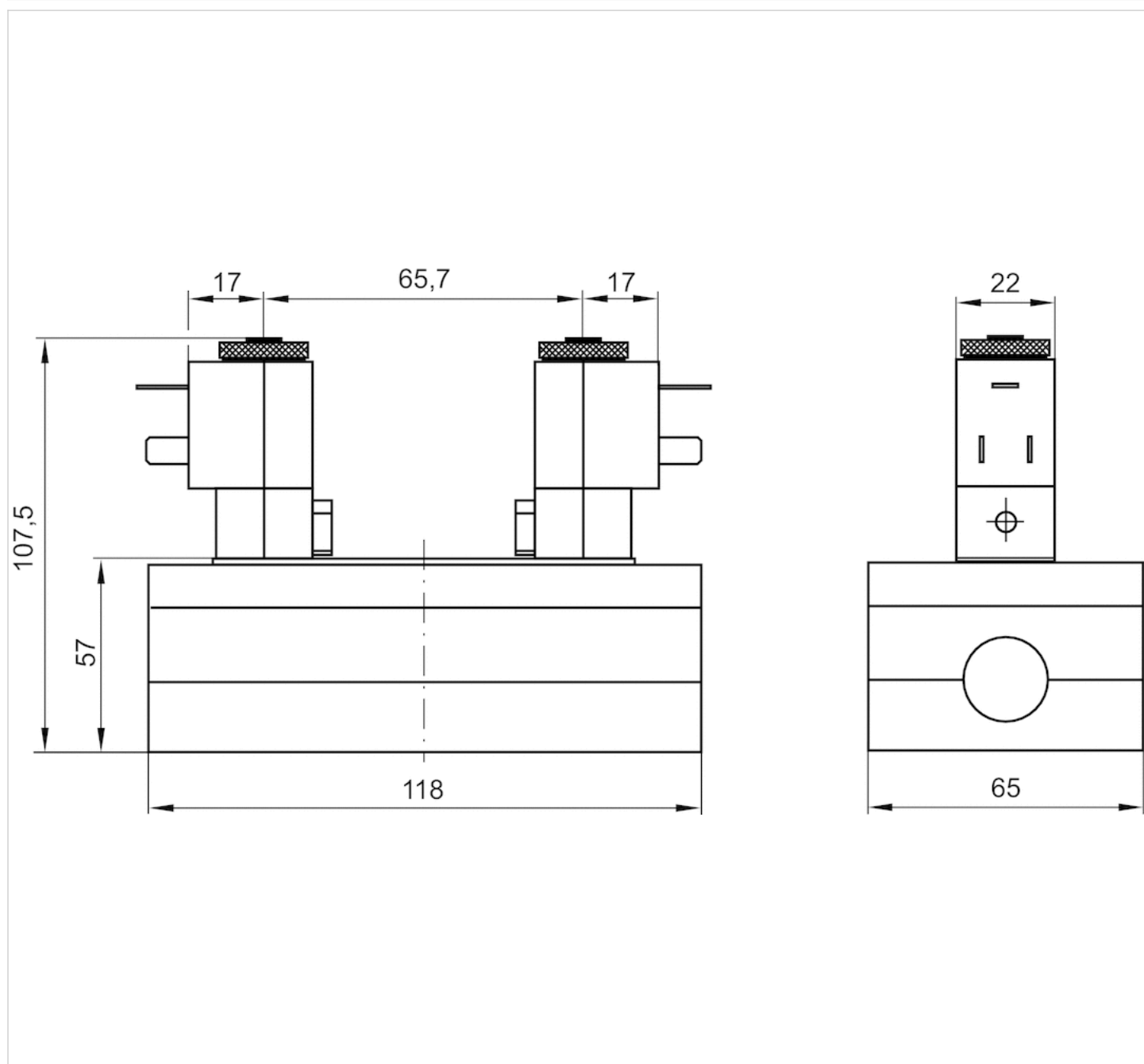
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Housing	Aluminum
Seals	Acrylonitrile butadiene rubber

Dimensions

Dimensions



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