

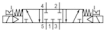
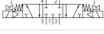
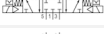
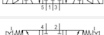
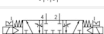
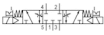
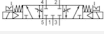
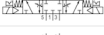
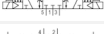
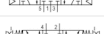
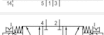
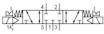
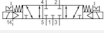
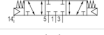
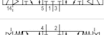
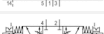
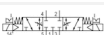
5/3-directional valve, Series 581, size 3

- ISO 5599-1
- ISO 3
- 5/3
- closed center
- closed center
- $Q_n = 4100 \text{ l/min}$
- 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.	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	4100 l/min
Flow conductance C	14,1 l/(s*bar)
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	23 ms
Typ. switch-off time	64 ms
Mounting screw	with hexagon socket
Mounting screw tightening torque	10 Nm
Weight	1,01 kg

Technical data

Part No.		MO		Operational voltage DC
5813420500			closed center	12 V
5813420200			closed center	-
5813420100			closed center	24 V
5813420600			closed center	48 V
5813420300			closed center	-
5813420400			closed center	-
5813420000			closed center	-
5813421500			closed center	12 V
5813421200			closed center	-
5813421100			closed center	24 V
5813421600			closed center	48 V
5813421300			closed center	-
5813421400			closed center	-
5813421000			closed center	-
5813422500			closed center	12 V
5813422200			closed center	-
5813422100			closed center	24 V
5813422600			closed center	48 V
5813422300			closed center	-
5813422400			closed center	-
5813422000			closed center	-
5813423500			closed center	12 V
5813423200			closed center	-
5813423100			closed center	24 V
5813423600			closed center	48 V
5813423300			closed center	-
5813423400			closed center	-
5813423000			closed center	-

Part No.	Operational voltage AC 50 Hz	Operational voltage AC 60 Hz	Voltage tolerance DC
5813420500	-	-	-10% / +10%
5813420200	24 V	-	-
5813420100	-	-	-10% / +10%
5813420600	-	-	-10% / +10%
5813420300	-	110 V	-
5813420400	230 V	-	-
5813420000	-	-	-
5813421500	-	-	-10% / +10%
5813421200	24 V	-	-
5813421100	-	-	-10% / +10%
5813421600	-	-	-10% / +10%
5813421300	-	110 V	-

Part No.	Operational voltage AC 50 Hz	Operational voltage AC 60 Hz	Voltage tolerance DC
5813421400	230 V	-	-
5813421000	-	-	-
5813422500	-	-	-10% / +10%
5813422200	24 V	-	-
5813422100	-	-	-10% / +10%
5813422600	-	-	-10% / +10%
5813422300	-	110 V	-
5813422400	230 V	-	-
5813422000	-	-	-
5813423500	-	-	-10% / +10%
5813423200	24 V	-	-
5813423100	-	-	-10% / +10%
5813423600	-	-	-10% / +10%
5813423300	-	110 V	-
5813423400	230 V	-	-
5813423000	-	-	-

Part No.	Voltage tolerance AC 50 Hz	Voltage tolerance AC 60 Hz	Power consumption DC	Holding power AC 50 Hz
5813420500	-	-	5 W	-
5813420200	-10% / +10%	-	-	8 VA
5813420100	-	-	5 W	-
5813420600	-	-	5 W	-
5813420300	-	-10% / +10%	-	-
5813420400	-10% / +10%	-	-	8 VA
5813420000	-	-	-	-
5813421500	-	-	5 W	-
5813421200	-10% / +10%	-	-	8 VA
5813421100	-	-	5 W	-
5813421600	-	-	5 W	-
5813421300	-	-10% / +10%	-	-
5813421400	-10% / +10%	-	-	8 VA
5813421000	-	-	-	-
5813422500	-	-	5 W	-
5813422200	-10% / +10%	-	-	8 VA
5813422100	-	-	5 W	-
5813422600	-	-	5 W	-
5813422300	-	-10% / +10%	-	-
5813422400	-10% / +10%	-	-	8 VA
5813422000	-	-	-	-
5813423500	-	-	5 W	-
5813423200	-10% / +10%	-	-	8 VA
5813423100	-	-	5 W	-
5813423600	-	-	5 W	-
5813423300	-	-10% / +10%	-	-
5813423400	-10% / +10%	-	-	8 VA
5813423000	-	-	-	-

Part No.	Holding power AC 60 Hz	Switch-on power AC 50 Hz	Switch-on power AC 60 Hz	Pilot
5813420500	-	-	-	Internal
5813420200	-	10 VA	-	Internal
5813420100	-	-	-	Internal
5813420600	-	-	-	Internal
5813420300	8 VA	-	10 VA	Internal
5813420400	-	10 VA	-	Internal
5813420000	-	-	-	Internal
5813421500	-	-	-	Internal
5813421200	-	10 VA	-	Internal
5813421100	-	-	-	Internal
5813421600	-	-	-	Internal
5813421300	8 VA	-	10 VA	Internal
5813421400	-	10 VA	-	Internal
5813421000	-	-	-	Internal
5813422500	-	-	-	External
5813422200	-	10 VA	-	External
5813422100	-	-	-	External
5813422600	-	-	-	External
5813422300	8 VA	-	10 VA	External
5813422400	-	10 VA	-	External
5813422000	-	-	-	External
5813423500	-	-	-	External
5813423200	-	10 VA	-	External
5813423100	-	-	-	External
5813423600	-	-	-	External
5813423300	8 VA	-	10 VA	External
5813423400	-	10 VA	-	External
5813423000	-	-	-	External

Part No.	Working pressure min./max.	Electrical connection Pilot valve
5813420500	3 ... 10 bar	Plug Form B, industry
5813420200	3 ... 10 bar	Plug Form B, industry
5813420100	3 ... 10 bar	Plug Form B, industry
5813420600	3 ... 10 bar	Plug Form B, industry
5813420300	3 ... 10 bar	Plug Form B, industry
5813420400	3 ... 10 bar	Plug Form B, industry
5813420000	3 ... 10 bar	Plug Form B, industry
5813421500	3 ... 10 bar	Plug Form B, industry
5813421200	3 ... 10 bar	Plug Form B, industry
5813421100	3 ... 10 bar	Plug Form B, industry
5813421600	3 ... 10 bar	Plug Form B, industry
5813421300	3 ... 10 bar	Plug Form B, industry
5813421400	3 ... 10 bar	Plug Form B, industry
5813421000	3 ... 10 bar	Plug Form B, industry
5813422500	-0,95 ... 10 bar	Plug Form B, industry
5813422200	-0,95 ... 10 bar	Plug Form B, industry

Part No.	Working pressure min./max.	Electrical connection Pilot valve
5813422100	-0,95 ... 10 bar	Plug Form B, industry
5813422600	-0,95 ... 10 bar	Plug Form B, industry
5813422300	-0,95 ... 10 bar	Plug Form B, industry
5813422400	-0,95 ... 10 bar	Plug Form B, industry
5813422000	-0,95 ... 10 bar	Plug Form B, industry
5813423500	-0,95 ... 10 bar	Plug Form B, industry
5813423200	-0,95 ... 10 bar	Plug Form B, industry
5813423100	-0,95 ... 10 bar	Plug Form B, industry
5813423600	-0,95 ... 10 bar	Plug Form B, industry
5813423300	-0,95 ... 10 bar	Plug Form B, industry
5813423400	-0,95 ... 10 bar	Plug Form B, industry
5813423000	-0,95 ... 10 bar	Plug Form B, industry

Part No.	basic valve with electrical connector	Throttle
5813420500	-	-
5813420200	-	-
5813420100	-	-
5813420600	-	-
5813420300	-	-
5813420400	-	-
5813420000	Basic valve without coil	-
5813421500	-	with throttle
5813421200	-	with throttle
5813421100	-	with throttle
5813421600	-	with throttle
5813421300	-	with throttle
5813421400	-	with throttle
5813421000	Basic valve without coil	with throttle
5813422500	-	-
5813422200	-	-
5813422100	-	-
5813422600	-	-
5813422300	-	-
5813422400	-	-
5813422000	Basic valve without coil	-
5813423500	-	with throttle
5813423200	-	with throttle
5813423100	-	with throttle
5813423600	-	with throttle
5813423300	-	with throttle
5813423400	-	with throttle
5813423000	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.

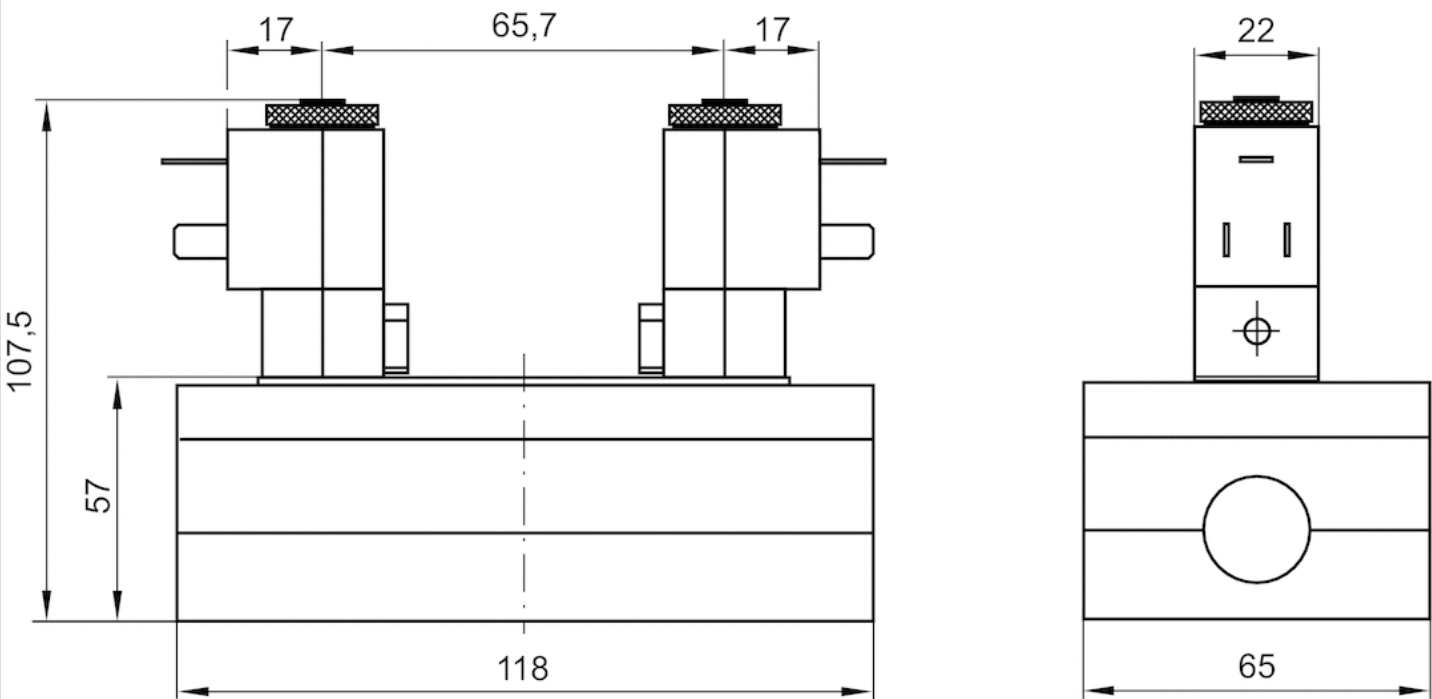
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in the MediaCentre).

Technical information

Housing	Aluminum
Seals	Acrylonitrile butadiene rubber

Dimensions

Dimensions



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