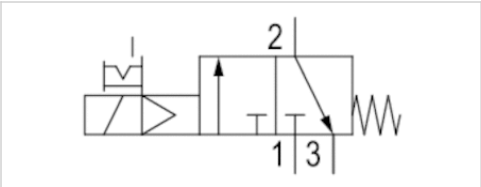
3/2-directional valve, Series 589

- 3/2
- Qn = 520-750 l/min
- NC
- Pipe connection
- Compressed air connection output : Ø 6x1 Ø 8x1
- Electrical connection : Plug, ISO 15217, form C
- single valve
- Manual override : with detent
- With spring return
- Pilot : Internal



Type	Poppet valve
Activation	Electrically
Pilot	Internal
Sealing principle	Soft sealing
Working pressure min./max.	3 ... 8 bar
Ambient temperature min./max.	-15 ... 50 °C
Medium temperature min./max.	-15 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
Nominal flow Qn	See table below
Protection class with connection	IP65
Reverse polarity protection	Protected against polarity reversal
Duty cycle	100 %
Typ. switch-on time	18 ms
Typ. switch-off time	16 ms
Weight	0,093 kg

Technical data

Part No.	MO		Compressed air connection	Compressed air connection
			Input	Output
5894400210		NC	Ø 6x1	Ø 6x1
5894400220		NC	Ø 6x1	Ø 6x1
5894400620		NC	Ø 6x1	Ø 6x1
5894405220		NC	Ø 6x1	Ø 6x1
5894405270		NC	Ø 6x1	Ø 6x1
5894405280		NC	Ø 6x1	Ø 6x1
5894405680		NC	Ø 6x1	Ø 6x1
5894600210		NC	Ø 8x1	Ø 8x1
5894600220		NC	Ø 8x1	Ø 8x1
5894600620		NC	Ø 8x1	Ø 8x1
5894605220		NC	Ø 8x1	Ø 8x1
5894605270		NC	Ø 8x1	Ø 8x1
5894605280		NC	Ø 8x1	Ø 8x1
5894605680		NC	Ø 8x1	Ø 8x1

Part No.	Compressed air connection	Operational voltage	Operational voltage
	Exhaust	DC	AC 50 Hz
5894400210	Ø 8x1	12 V	-
5894400220	Ø 8x1	24 V	-
5894400620	Ø 8x1	24 V	-
5894405220	Ø 8x1	-	24 V
5894405270	Ø 8x1	-	110 V
5894405280	Ø 8x1	-	230 V
5894405680	Ø 8x1	-	230 V
5894600210	Ø 8x1	12 V	-
5894600220	Ø 8x1	24 V	-
5894600620	Ø 8x1	24 V	-
5894605220	Ø 8x1	-	24 V
5894605270	Ø 8x1	-	110 V
5894605280	Ø 8x1	-	230 V
5894605680	Ø 8x1	-	230 V

Part No.	Operational voltage	Voltage tolerance	Voltage tolerance	Voltage tolerance
	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz
5894400210	-	-10% / +10%	-	-
5894400220	-	-10% / +10%	-	-
5894400620	-	-10% / +10%	-	-
5894405220	24 V	-	-10% / +15%	-10% / +15%
5894405270	110 V	-	-10% / +15%	-10% / +15%
5894405280	230 V	-	-10% / +15%	-10% / +15%
5894405680	230 V	-	-10% / +15%	-10% / +15%
5894600210	-	-10% / +10%	-	-
5894600220	-	-10% / +10%	-	-
5894600620	-	-10% / +10%	-	-

Part No.	Operational voltage	Voltage tolerance	Voltage tolerance	Voltage tolerance
	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz
5894605220	24 V	-	-10% / +15%	-10% / +15%
5894605270	110 V	-	-10% / +15%	-10% / +15%
5894605280	230 V	-	-10% / +15%	-10% / +15%
5894605680	230 V	-	-10% / +15%	-10% / +15%

Part No.	Power consumption	Holding power	Holding power	Switch-on power
	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz
5894400210	1,6 W	-	-	-
5894400220	1,6 W	-	-	-
5894400620	1,7 W	-	-	-
5894405220	-	2,2 VA	1,8 VA	3 VA
5894405270	-	3 VA	2,4 VA	4,2 VA
5894405280	-	2,3 VA	2 VA	3,2 VA
5894405680	-	2,5 VA	2,2 VA	3,4 VA
5894600210	1,6 W	-	-	-
5894600220	1,6 W	-	-	-
5894600620	1,7 W	-	-	-
5894605220	-	2,2 VA	1,8 VA	3 VA
5894605270	-	3 VA	2,4 VA	4,2 VA
5894605280	-	2,3 VA	2 VA	3,2 VA
5894605680	-	2,5 VA	2,2 VA	3,4 VA

Part No.	Switch-on power	Nominal flow Qn	LED status display	
	AC 60 Hz			
5894400210	-	520 l/min	-	-
5894400220	-	520 l/min	-	-
5894400620	-	520 l/min	Red	1)
5894405220	2,6 VA	520 l/min	-	-
5894405270	3,4 VA	520 l/min	-	-
5894405280	2,8 VA	520 l/min	-	-
5894405680	3 VA	520 l/min	Red	-
5894600210	-	750 l/min	-	-
5894600220	-	750 l/min	-	-
5894600620	-	750 l/min	Red	1)
5894605220	2,6 VA	750 l/min	-	-
5894605270	3,4 VA	750 l/min	-	-
5894605280	2,8 VA	750 l/min	-	-
5894605680	3 VA	750 l/min	Red	-

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

1) With LED and protective diode for reducing voltage peaks in the solenoid coil, protected against polarity reversal

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).

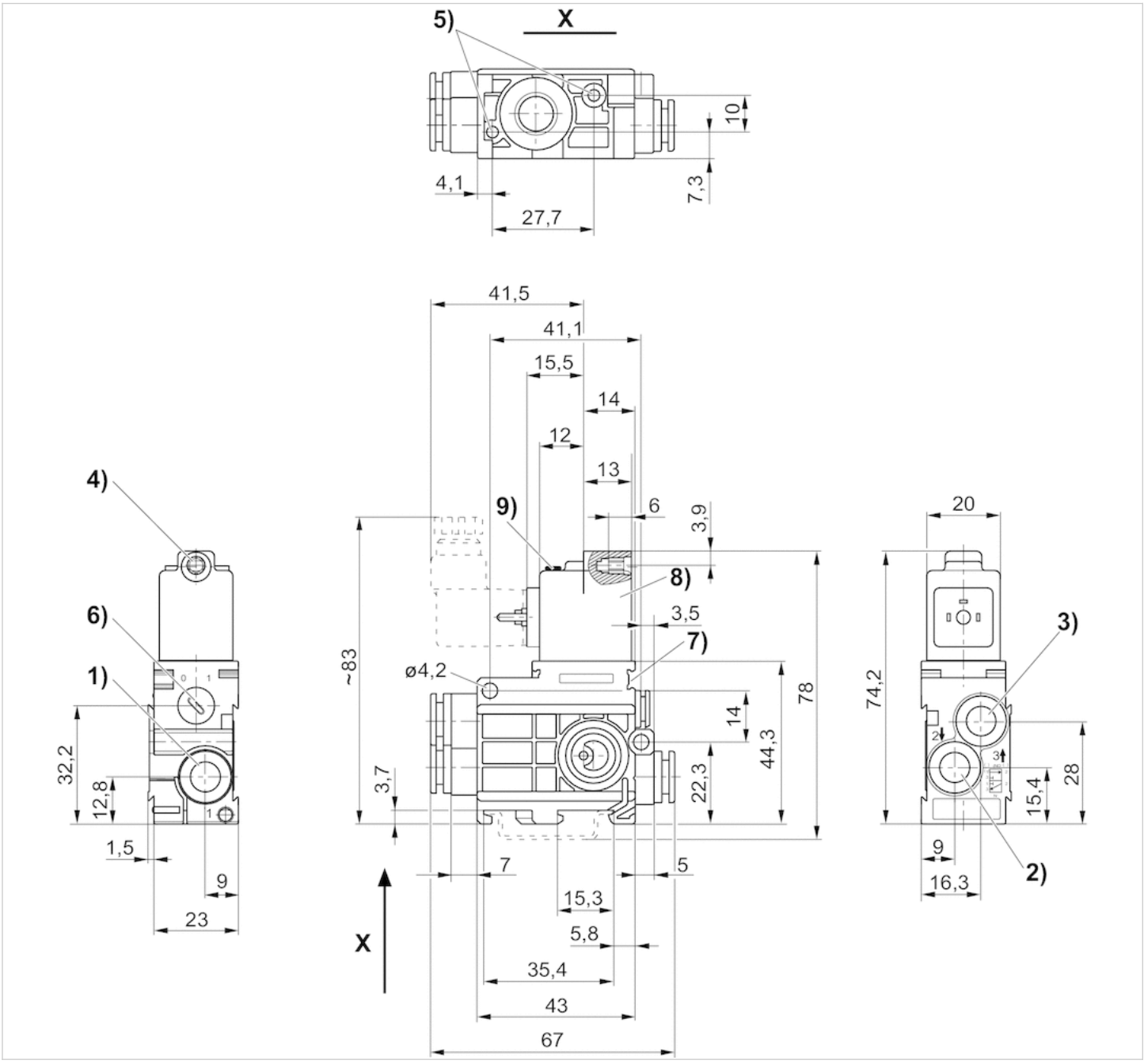
At an ambient temperature of 40 °C the max. working pressure is 10 bar .
Versions with voltage of less than 50 V DC do not have a protective ground.
Working pressure with vacuum operation, connection 1: min. 3 bar , connection 3: min. - 0.95 bar

Technical information

Material	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber Polyurethane

Dimensions

Dimensions



1) port 1 2) port 2 3) port 3 4) core Ø for M 5 5) pocket hole 6 mm deep for 3.5 self-tapping screw 6) manual override 7) Pilot valve 8) coil can be rotated at 180° intervals

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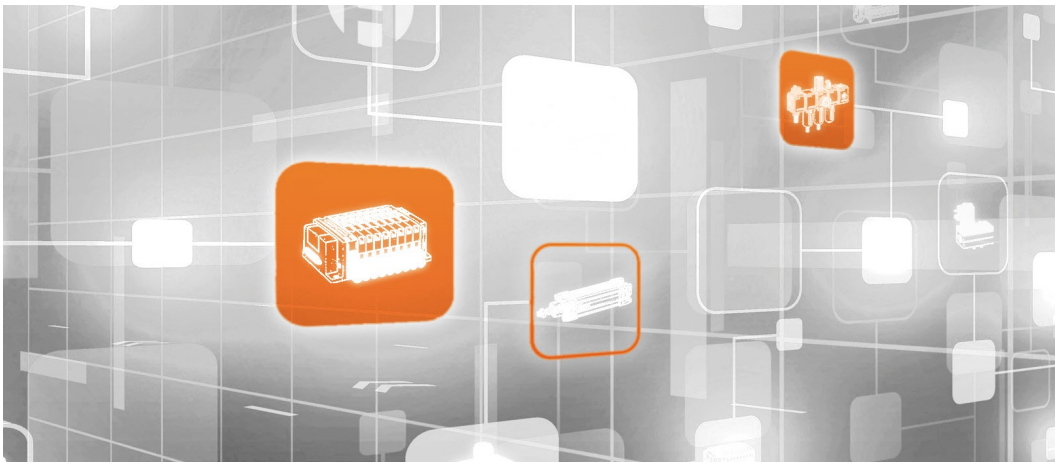

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