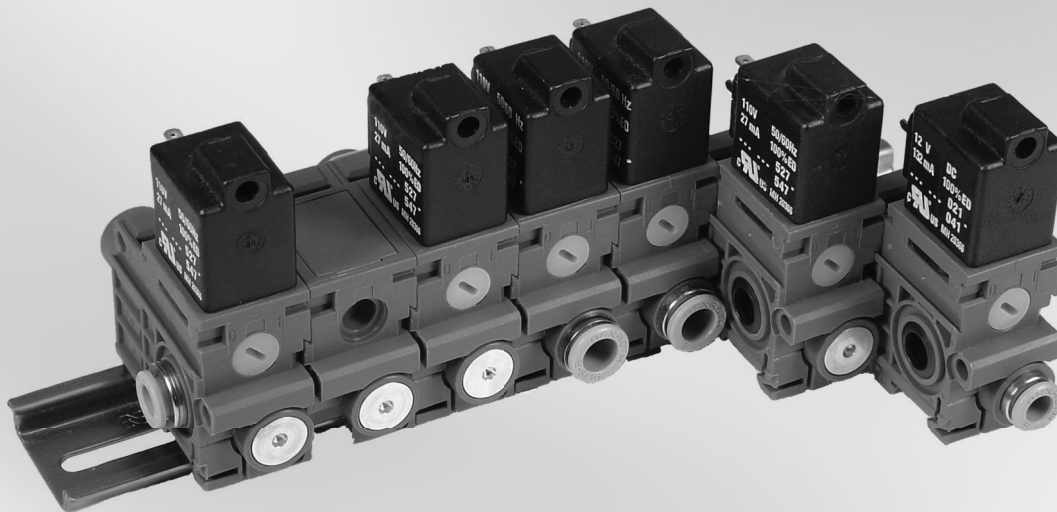


SERIES 579 & 589 PNEUMATIC DIRECTIONAL CONTROL VALVES

Pneumatics
It's that easy



Series 579 and 589 Directional Control Valves

Modular, economical, high flow

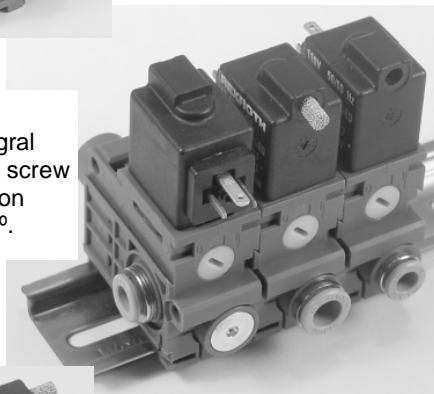
Takes modularity to a new level -

The AVENTICS Series 579 and 589 valves can be combined without tools by means of an ingenious dovetail design, or used as single, in-line valves. Available in 3/2 and 5/2 functions with solenoid or air pilot operators, the design types can be combined onto the same manifold easily. The light weight, yet durable, polymer construction results in a space-saving valve system with high flow rates (up to 0.85 C_v). The poppet valve design offers few wearing parts and delivers short response times—all at a low cost!



Modularity, on-line configurator

The dovetail design allows combining valves of different types, like 3/2 or 5/2, easily—without tools. Our on-line configurator allows you to design your own custom, factory-assembled manifold with inch or metric ports - without worrying about mistakes, and receive a part number immediately.



Mounting flexibility

Mount using DIN rail, integral side mount or self tapping screw in bottom of valve. Snap-on coils can be reversed 180°.

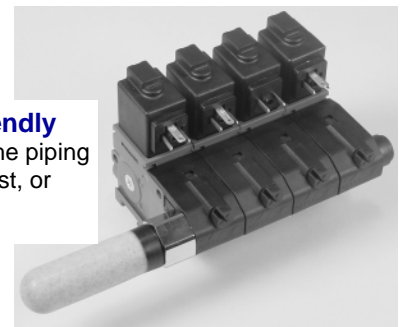


Silencer options

Polymer silencer clips onto valve housing. Sintered bronze silencers available for pilot exhaust.

Environmentally friendly

Plug-in modules allow the piping away of manifold exhaust, or use a silencer.



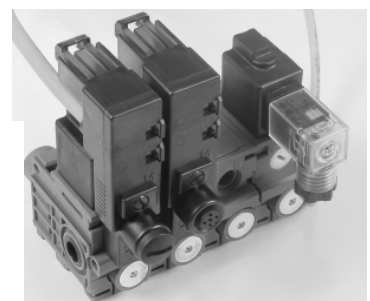
Additional air connection

Optional module allows a second compressed air supply port for high air consumption applications or to supply from the opposite side. Multiple pressures can be fed into the valve manifold.



Electrical flexibility

Contact bridges are available for bus control options, or use lighted or non-lighted connectors.



Lengthy features list:

- Light weight, space-saving, polymer design, inherent corrosion resistance
- High flow, up to 0.85 C_v
- Maintenance free, poppet design
- Short response times
- Common dovetail connection for combining valves and accessories
- Convenient, integrated push-in air line tube connections in 1/4", 5/16" (8mm) and 6mm — saves cost of fittings
- Use with or without air line lubrication
- Low power consumption
- Solenoid operators in a variety of voltages (110VAC, 24VDC, etc.) or air pilot
- 3/2 and 5/2 configurations
- Contact bridges for bus control
- Economically priced
- Wide variety of accessories
- On-line configurator for designing valve manifolds
- U.L. recognized coil

	Page
Part number model code for Series 579/589.....	2
Series 579 3/2 single valve, solenoid operated, NC.....	3
Series 579 3/2 valves for valve units, sol. operated, NC.....	5
Series 579 3/2 single valve, solenoid operated, NO	8
Series 579 3/2 valves for valve units, sol. operated NO.....	10
Series 579 3/2 single valve, sol. operated, NC, external pilot	13
Series 579 3/2 valves for valve units, sol. oper., NC, ext. pilot....	15
Series 579 3/2 single valve, sol. operated, NO, external pilot.....	18
Series 579 3/2 valves for valve units, sol. oper., NO, ext. pilot....	20
Series 579 5/2 single valve, solenoid operated.....	23
Series 579 5/2 valves for valve units, solenoid operated	25
Series 579 3/2 single valve, air pilot.....	28
Series 579 3/2 valves for valve units, air pilot	29
Series 589 3/2 single valve, solenoid operated, NC.....	31
Series 589 3/2 single valve, solenoid operated, NO	33
Series 589 3/2 single valve, solenoid operated, NC, ext. pilot	35
Series 589 3/2 single valve, solenoid operated, NO, ext. pilot	37
Series 589 5/2 single valve, solenoid operated.....	39
Series 589 3/2 single valve, air pilot.....	41
Series 579/589 valve units, electrical version 10-18	43
Series 579/589 valve units, electrical version 20-21	44
Series 579/589 valve units, electrical version 60.....	45
Series 579/589 valve units, electrical version 70-71	46
Connectors	47
Accessories	48
Contact bridges	52



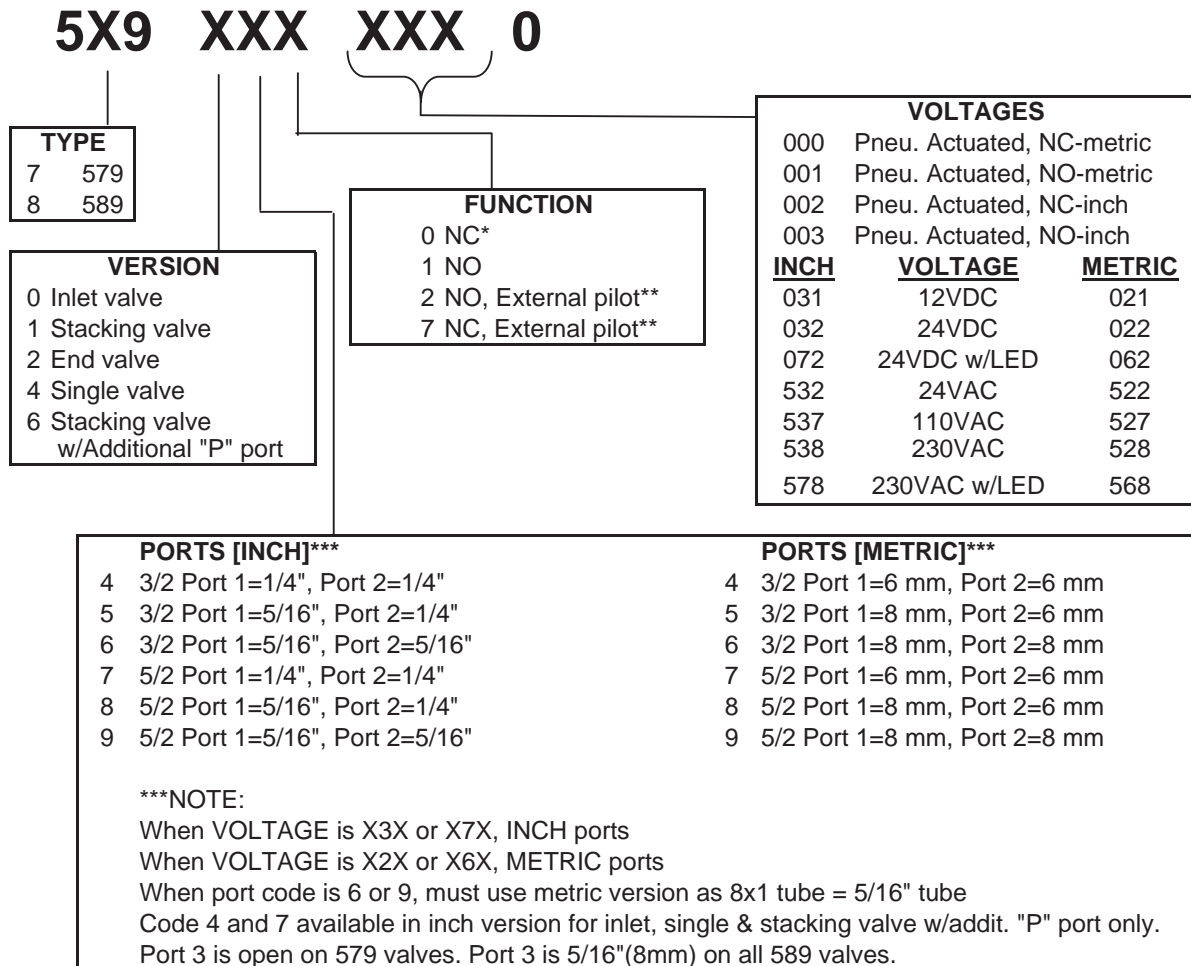
Application area

The primary difference between the Series 579 and Series 589 is that the exhaust on the Series 589 can be throttled, and the Series 589 can also be used for vacuum applications.

Series 579 and 589, ND 4,
6x1 mm, 8x1 mm, 1/4" or 5/16" dia.



Part Number Model Code for Series 579/589



* Also applies to pneumatically actuated valves.

** External pilot port is always 5/32" (4 mm).

► Application area

The primary difference between the Series 579 and Series 589 is that the exhaust on the Series 589 can be throttled, and the Series 589 can also be used for vacuum applications.

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Single valve, solenoid operated, NC



Technical Data

Valve type	Poppet valve	
Working pressure range	Min. 2 bar (29 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)	
Nominal flow rate at 6 bar (87 psi), $\Delta p = 1$ bar (15 psi)	See table	
Ambient temperature range	-15 °C to +50 °C (at $p_{max} = 8$ bar) (+5 °F to +122 °F (at $p_{max} = 116$ psi))	
Medium	Compressed air, lubricated or non-lubricated	
Weight	0.093 kg (0.205 lbs)	
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances		DC ± 10 % AC - 10 % + 15 % AC - 15 % + 10 %
Power consumption	60 Hz	1.6 W
24 V DC	50 Hz	1.7 W
Inrush power	without LED-indic.	3.1 / 2.7 VA
Holding power	with LED-indic.	2.2 / 1.9 VA
Insulation class	220 V AC 50/60 Hz	B to VDE 0580
Protection with el. connector	220 V AC 50/60 Hz	IP 65 to IEC 529 (DIN VDE 0470) (NEMA 4)
Duty cycle		100 %
Switching times	t_f fill	18 ms
	t_E exhaust	16 ms



Application area

Suitable for all mechanical control systems, especially corrosion proof or lightweight applications.

Part no. (metric)

	Qn [l/min] (Cv)	Port 1	Port 2	Voltages	Part no. *
	850 (0.85)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	12 V DC	5794600210
				24 V DC	5794600220
				24 V DC**	5794600620
				24 V AC	5794605220
				110 V AC	5794605270
				220/230 V AC	5794605280
				220/230 V AC ***	5794605680
	520 (0.52)	tube 6 x 1	tube 6 x 1	12 V DC	5794400210
				24 V DC	5794400220
				24 V DC**	5794400620
				24 V AC	5794405220
				110 V AC	5794405270
				220/230 V AC	5794405280
				220/230 V AC ***	5794405680

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)

*** 220/ 230 V AC model with LED

Other voltages on request.

Part no. (inch)

	Qn [l/min] (Cv)	Port 1	Port 2	Voltages	Part no. *
	520 (0.52)	tube 1/4 "	tube 1/4 "	12 V DC	5794400310
				24 V DC	5794400320
				24 V DC**	5794400720
				24 V AC	5794405320
				110 V AC	5794405370
				220/230 V AC	5794405380
				220/230 V AC ***	5794405780

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)




*** 220/ 230 V AC model with LED

Other voltages on request

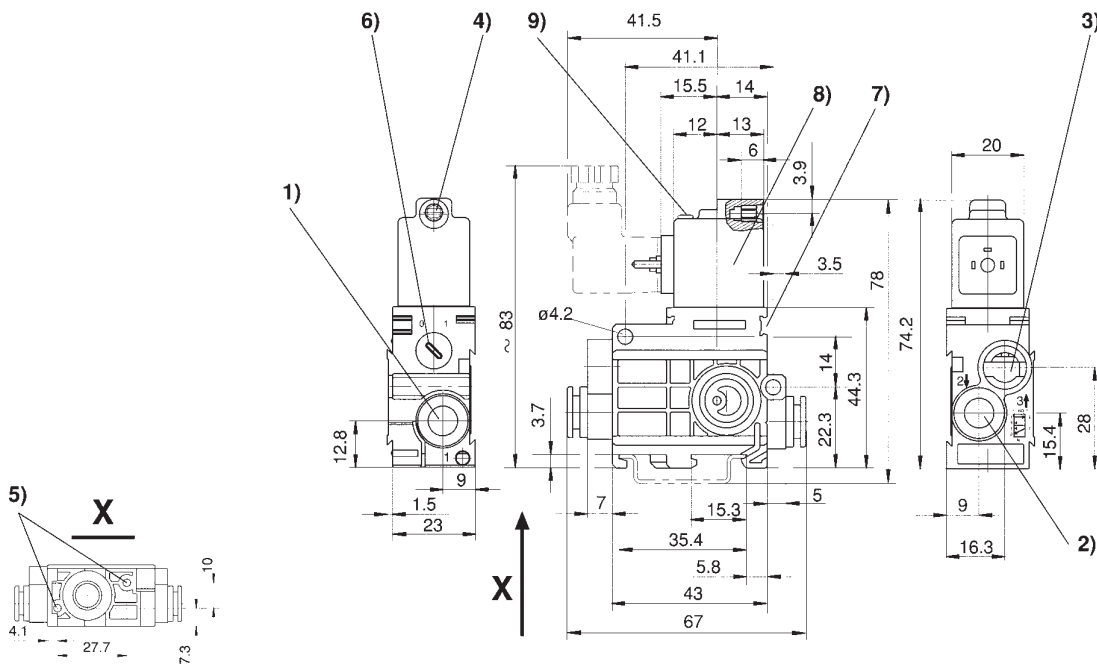
3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Single valve, solenoid operated, NC



▲ Accessories (to be ordered separately)						
Accessory	Description	Part no.				
	Silencer, M5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer for port 3	5790005312				
	Set screw	8102060582	50-pcs			
	Nameplates 1–10	8943056312	Pkg qty 5-pcs			
	Nameplates 11–20	8943056322	Pkg qty 5-pcs			
	Star washer	8952203504	100 pcs			
	Filter	8993800164	10 pcs			
	See Connectors page					
	Voltage	24 V DC				
	for BUS- and Multipin-systems					
	Contact bridge with 0.2 m cable	5763503113				
	Contact bridge with 1 m cable	5763513113				
	Voltages	12 V DC	24 V DC	24 V AC	110 V AC	220/230 V AC
	Pilot valve	5420930210	5420930220	5420935220	5420935270	5420935280
	with LED		5420940620 ¹⁾			5420945680

¹⁾ and protected wiring



- 1) Port 1. 2) Port 2. 3) Port 3 exhaust air must not be throttled. 4) Pilot exhaust core dia. for M5. 5) Pocket hole 6 deep for 3,5 self-tapping screw.
6) Manual override. 7) Mounting space for nameplate. 8) Coil can be rotated at 180° intervals. 9) LED.

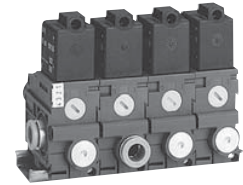
3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Valves for valve units, solenoid operated, NC



Technical Data

Valve type	Poppet valve	
Working pressure range	Min. 2 bar (29 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)	
Nominal flow rate Qn	For tube 6x1, 1/4", 520 l/min (0.52 Cv) For tube 8x1, 5/16", 850 l/min (0.85 Cv)	
at 6 bar (87 psi), Δp = 1 bar (15 psi)		
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Weight	0.093 kg (0.205 lbs)	
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances		DC ± 10 % AC - 15 % + 10 % AC - 10 % + 15 %
Power consumption	50 Hz	1.6 W
24 V DC	60 Hz	1.7 W
Inrush power	without LED display	3.1 / 2.7 VA
Holding power	with LED display	2.2 / 1.9 VA
Insulation class	220 V AC 50/60 Hz	B to VDE 0580
Protection with el. connector	220 V AC 50/60 Hz	IP 65 to IEC 529 (DIN VDE 0470)(NEMA 4)
Duty cycle		100 %
Switching times	t _F fill	18 ms
	t _E exhaust	16 ms



Application area

Suitable for all mechanical control systems, especially corrosion proof or lightweight applications.

Part no. for DC versions (metric)

Description	Port 1	Port 2	Fig. / Item no.	Part no. * 12 V DC	Part no. * 24 V DC	Part no. * 24 V DC**
Inlet valve	tube 8 x 1	tube 6 x 1	A and B / I	5790500210	5790500220	5790500620
	tube 8 x 1	tube 8 x 1	A and B / I	5790600210	5790600220	5790600620
Stacking valve	–	tube 6 x 1	B / III	5791500210	5791500220	5791500620
	–	tube 8 x 1	B / III	5791600210	5791600220	5791600620
Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	B / II	5796400210	5796400220	5796400620
	tube 8 x 1	tube 6 x 1	B / II	5796500210	5796500220	5796500620
	tube 8 x 1	tube 8 x 1	B / II	5796600210	5796600220	5796600620
End valve	–	tube 6 x 1	–	5792500210	5792500220	5792500620
	–	tube 8 x 1	–	5792600210	5792600220	5792600620
Air conn. module	tube 8 x 1	–	B	5790000092	5790000092	5790000092

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)
other voltages on request

Part no. for DC versions (inch)

Description	Port 1	Port 2	Fig. / Item no.	Part no. * 12 V DC	Part no. * 24 V DC	Part no. * 24 V DC**
Inlet valve	tube 1/4"	tube 1/4"	A and B / I	5790400310	5790400320	5790400720
	tube 5/16"	tube 1/4"	A and B / I	5790500310	5790500320	5790500720
	tube 5/16"	tube 5/16"	A and B / I	5790600210	5790600220	5790600620
Stacking valve	–	tube 1/4"	B / III	5791500310	5791500320	5791500720
	–	tube 5/16"	B / III	5791600210	5791600220	5791600620
Stacking valve with add. compressed air port	tube 1/4"	tube 1/4"	B / II	5796400310	5796400320	5796400720
	tube 5/16"	tube 1/4"	B / II	5796500310	5796500320	5796500720
	tube 5/16"	tube 5/16"	B / II	5796600210	5796600220	5796600620
End valve	–	tube 1/4"	–	5792500310	5792500320	5792500720
	–	tube 5/16"	–	5792600210	5792600220	5792600620
Air conn. module	tube 5/16"	–	B	5790000092	5790000092	5790000092

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)
other voltages on request

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Valves for valve units, solenoid operated, NC



Part no. for AC versions (metric)

Description	Port 1	Port 2	Fig. / Item no.	Part no. * AC 24 V	Part no. * AC 110 V
Inlet valve	tube 8 x 1	tube 6 x 1	A and B / I	5790505220	5790505270
	tube 8 x 1	tube 8 x 1	A and B / I	5790605220	5790605270
Stacking valve	–	tube 6 x 1	B / III	5791505220	5791505270
	–	tube 8 x 1	B / III	5791605220	5791605270
Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	B / II	5796405220	5796405270
	tube 8 x 1	tube 6 x 1	B / II	5796505220	5796505270
End valve	–	tube 6 x 1	–	5792505220	5792505270
	–	tube 8 x 1	–	5792605220	5792605270
Air conn. Module	tube 8 x 1	–	B	5790000092	5790000092

* without electrical connector
other voltages on request

Part no. for AC versions (inch)

Description	Port 1	Port 2	Fig. / Item no.	Part no. * 24 V AC	Part no. * 110 V AC
Inlet valve	tube 1/4 "	tube 1/4 "	A and B / I	5790405320	5790405370
	tube 5/16 "	tube 1/4 "	A and B / I	5790505320	5790505370
	tube 5/16 "	tube 5/16 "	A and B / I	5790605220	5790605270
Stacking valve	–	tube 1/4 "	B / III	5791505320	5791505370
	–	tube 5/16 "	B / III	5791605220	5791605270
Stacking valve with add. compressed air port	tube 1/4 "	tube 1/4 "	B / II	5796405320	5796405370
	tube 5/16 "	tube 1/4 "	B / II	5796505320	5796505370
	tube 5/16 "	tube 5/16 "	B / II	5796605220	5796605270
End valve	–	tube 1/4 "	–	5792505320	5792505370
	–	tube 5/16 "	–	5792605220	5792605270
Air connection module	tube 5/16 "	–	B	5790000092	5790000092

* without el. connector
other voltages on request

Part no. for AC versions (metric)

Description	Port 1	Port 2	Fig. / Item no.	Part no. * 220/230 V AC	Part no. * 220/230 V AC **
Inlet valve	tube 8 x 1	tube 6 x 1	A and B / I	5790505280	5790505680
	tube 8 x 1	tube 8 x 1	A and B / I	5790605280	5790605680
Stacking valve	–	tube 6 x 1	B / III	5791505280	5791505680
	–	tube 8 x 1	B / III	5791605280	5791605680
Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	B / II	5796405280	5796405680
	tube 8 x 1	tube 6 x 1	B / II	5796505280	5796505680
	tube 8 x 1	tube 8 x 1	B / II	5796605280	5796605680
End valve	–	tube 6 x 1	–	5792505280	5792505680
	–	tube 8 x 1	–	5792605280	5792605680
Air connection module	tube 8 x 1	–	B	5790000092	5790000092

* without el. connector ** 220/230 V AC model with LED
other voltages on request

Part no. for AC versions (inch)

Description	Port 1	Port 2	Fig. / Item no.	Part no. * 220/230 VAC	Part no. * 220/230VAC
Inlet valve	tube 1/4 "	tube 1/4 "	A and B / I	5790405380	5790405780
	tube 5/16 "	tube 1/4 "	A and B / I	5790505380	5790505780
	tube 5/16 "	tube 5/16 "	A and B / I	5790605280	5790605680
Stacking valve	–	tube 1/4 "	B / III	5791505380	5791505780
	–	tube 5/16 "	B / III	5791605280	5791605680
Stacking valve with add. compressed air port	tube 1/4 "	tube 1/4 "	B / II	5796405380	5796405780
	tube 5/16 "	tube 1/4 "	B / II	5796505380	5796505780
	tube 5/16 "	tube 5/16 "	B / II	5796605280	5796605680
End valve	–	tube 1/4 "	–	5792505380	5792505780
	–	tube 5/16 "	–	5792605280	5792605680
Air connection module	tube 5/16 "	–	B	5790000092	5790000092




* without el. connector ** 220/230 V AC model with LED
other voltages on request

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Valves for valve units, solenoid operated, NC

AVENTICS®

▲ Accessories (to be ordered separately)

Accessory	Description	Part no.				
	Silencer, M 5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer for port 3	5790005312				
	Set screw	8102060582	50-pcs			
	Nameplates 1–10	8943056312	Pkg qty 5-pcs			
	Nameplates 11–20	8943056322	Pkg qty 5-pcs			
	Star washer	8952203504	100 pcs			
	Filter	8993800164	10 pcs			
	See Connectors page					
	Voltage	24 V DC				
	for BUS- and Multipin-systems					
	Contact bridge with 0,2 m cable	5763503113				
	Contact bridge with 1 m cable	5763513113				
	Voltages	12 V DC	24 V DC	24 V AC	110 V AC	220/230 V AC
	Pilot valve	5420930210	5420930220	5420935220	5420935270	5420935280
	with LED		5420940620 ¹⁾			5420945680

¹⁾ and protected wiring

Fig. A

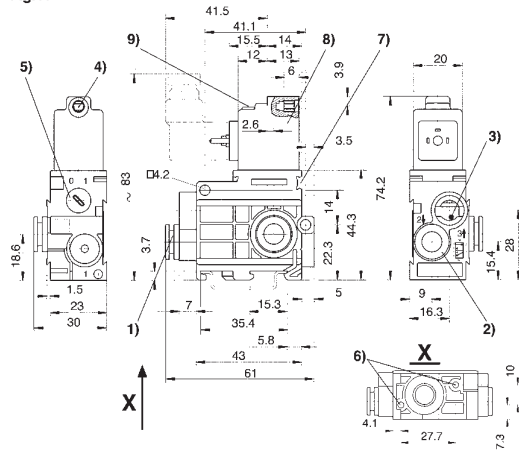
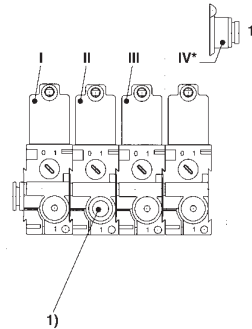


Fig. B



- 1) Port 1. 2) Port 2. 3) Port 3 (without tube fitting) exhaust air must not be throttled. 4) Pilot exhaust core dia. for M 5. 5) Manual override.
6) Pocket hole 6 deep for 3,5 self-tapping screw. 7) Mounting space for nameplate. 8) Coil can be rotated at 180° intervals. 9) LED.
* Air conn. module (Item IV) mounted onto stacking valve (Item II) permits additional air supply from right hand side. End valve (Item III) not required.

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Single valve, solenoid operated, NO



Technical Data

Valve type	Poppet valve	
Working pressure range	Min. 2 bar (29 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)	
Nominal flow rate at 6 bar (87 psi), Δp = 1 bar (15 psi)	Qn	See table
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Weight	0.093 kg (0.205 lbs)	
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances	DC ± 10 % AC - 10 % + 15 % AC - 15 % + 10 %	
Power consumption	60 Hz 50 Hz	1.6 W 1.7 W
24 V DC	without LED display with LED display	3.1 / 2.7 VA 2.2 / 1.9 VA
Inrush power	220 V AC 50/60 Hz	3.1 / 2.7 VA
Holding power	220 V AC 50/60 Hz	2.2 / 1.9 VA
Insulation class	B to VDE 0580	
Protection with el. connector	IP 65 to IEC 529 (DIN VDE 0470)(NEMA 4)	
Duty cycle	100 %	
Switching times	t _f fill t _E exhaust	18 ms 16 ms



Application area

Suitable for all mechanical control systems, especially corrosion proof or lightweight applications.

Part no. (metric)

	Qn [l/min] (Cv)	Port 1	Port 2	Voltages	Part no. *
	600 (0.60)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	12 V DC	5794610210
				24 V DC	5794610220
				24 V DC**	5794610620
				24 V AC	5794615220
				110 V AC	5794615270
				220/230 V AC	5794615280
				220/230 V AC ***	5794615680
	520 (0.52)	tube 6 x 1	tube 6 x 1	12 V DC	5794410210
				24 V DC	5794410220
				24 V DC**	5794410620
				24 V AC	5794415220
				110 V AC	5794415270
				220/230 V AC	5794415280
				220/230 V AC ***	5794415680

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)

*** 220/ 230 V AC model with LED
other voltages on request

Part no. (inch)

	Qn [l/min] (Cv)	Port 1	Port 2	Voltages	Part no. *
	520 (0.52)	tube 1/4 "	tube 1/4 "	12 V DC	5794410310
				24 V DC	5794410320
				24 V DC**	5794410720
				24 V AC	5794415320
				110 V AC	5794415370
				220/230 V AC	5794415380
				220/230 V AC ***	5794415780

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)

*** 220/ 230 V AC model with LED
other voltages on request

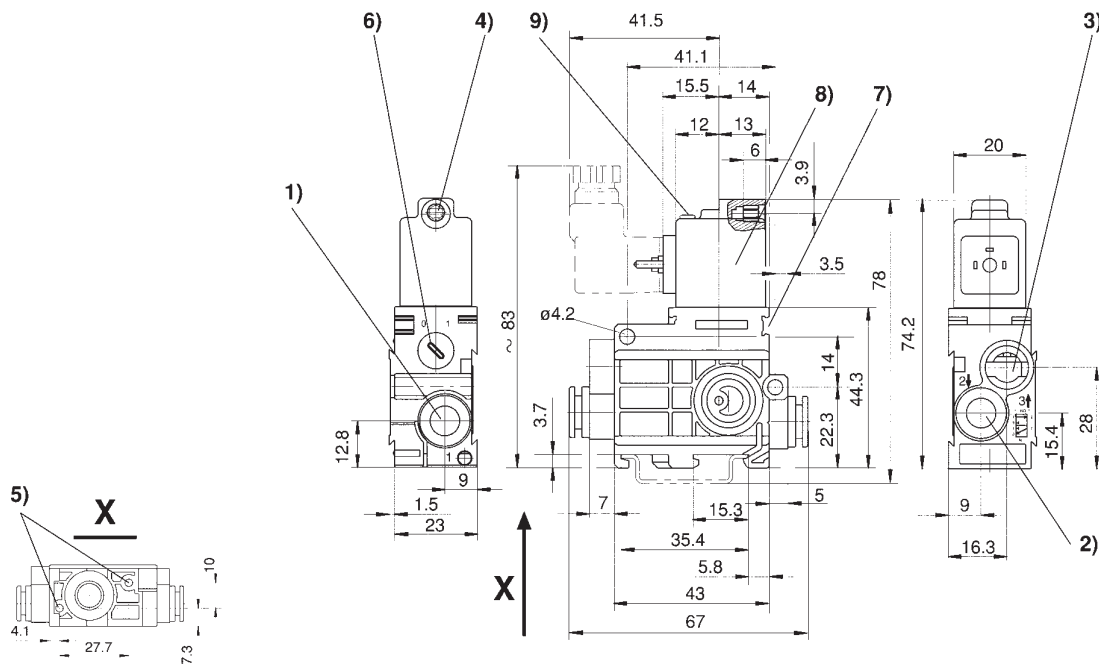
3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Single valve, solenoid operated, NO



▲ Accessories (to be ordered separately)						
Accessory	Description	Part no.				
	Silencer, M 5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer for port 3	5790005312				
	Set screw	8102060582	50-pcs			
	Nameplates 1–10	8943056312	Pkg qty 5-pcs			
	Nameplates 11–20	8943056322	Pkg qty 5-pcs			
	Star washer	8952203504	100 pcs			
	Filter	8993800164	10 pcs			
	See Connectors page					
	Voltage	24 V DC				
	for BUS- and Multipin-systems					
	Contact bridge with 0,2 m cable	5763503113				
	Contact bridge with 1 m cable	5763513113				
	Voltages	12 V DC	24 V DC	24 V AC	110 V AC	220/230 V AC
	Pilot valve	5420930210	5420930220	5420935220	5420935270	5420935280
	with LED		5420940620 ¹⁾			5420945680

¹⁾ and protected wiring



- 1) Port 1 2) Port 2 3) Port 3 exhaust air must not be throttled. 4) Pilot exhaust core dia. for M 5 5) Pocket hole 6 deep for 3,5 self-tapping screw
6) Manual override 7) Mounting space for nameplate 8) Coil can be rotated at 180° intervals 9) LED

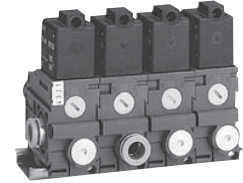
3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Valves for valve units, solenoid operated, NO



Technical Data

Valve type	Poppet valve	
Working pressure range	Min. 2 bar (29 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)	
Nominal flow rate	Qn	For tube 6x1 or 1/4 " 520 l/min (0.52 Cv) For tube 8x1 or 5/16 ", 600 l/min (0.60 Cv)
at 6 bar (87 psi), Δp = 1 bar (15 psi)		
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Weight	0.093 kg (0.205 lbs)	
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances		DC ± 10 % AC - 15 % + 10 % AC - 10 % + 15 %
Power consumption	50 Hz 60 Hz	1.6 W 1.7 W
24 V DC	without LED display with LED display	3.1 / 2.7 VA
Inrush power	220 V AC 50/60 Hz	2.2 / 1.9 VA
Holding power	220 V AC 50/60 Hz	B to VDE 0580
Insulation class		IP 65 to IEC 529 (DIN VDE 0470)(NEMA 4)
Protection with el. connector		100 %
Duty cycle		18 ms
Switching times	t _F fill t _E exhaust	16 ms



Application area

Suitable for all mechanical control systems, especially corrosion proof or lightweight applications.

Part no. for DC versions (metric)

Description	Port 1	Port 2	Fig. / Item no.	Part no. * 12 V DC	Part no. * 24 V DC	Part no. * 24 V DC**
Inlet valve	tube 8 x 1	tube 6 x 1	A and B / I	5790510210	5790510220	5790510620
	tube 8 x 1	tube 8 x 1	A and B / I	5790610210	5790610220	5790610620
Stacking valve	—	tube 6 x 1	B / III	5791510210	5791510220	5791510620
	—	tube 8 x 1	B / III	5791610210	5791610220	5791610620
Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	B / II	5796410210	5796410220	5796410620
	tube 8 x 1	tube 6 x 1	B / II	5796510210	5796510220	5796510620
	tube 8 x 1	tube 8 x 1	B / II	5796610210	5796610220	5796610620
End valve	—	tube 6 x 1	—	5792510210	5792510220	5792510620
	—	tube 8 x 1	—	5792610210	5792610220	5792610620
Air conn. module	tube 8 x 1	—	B	5790000092	5790000092	5790000092

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)
other voltages on request

Part no. for DC versions (inch)

Description	Port 1	Port 2	Fig. / Item no.	Part no. * 12 V DC	Part no. * 24 V DC	Part no. * 24 V DC**
Inlet valve	tube 1/4 "	tube 1/4 "	A and B / I	5790410310	5790410320	5790410720
	tube 5/16 "	tube 1/4 "	A and B / I	5790510310	5790510320	5790510720
	tube 5/16 "	tube 5/16 "	A and B / I	5790610210	5790610220	5790610620
Stacking valve	—	tube 1/4 "	B / III	5791510310	5791510320	5791510720
	—	tube 5/16 "	B / III	5791610210	5791610220	5791610620
Stacking valve with add. compressed air port	tube 1/4 "	tube 1/4 "	B / II	5796410310	5796410320	5796410720
	tube 5/16 "	tube 1/4 "	B / II	5796510310	5796510320	5796510720
	tube 5/16 "	tube 5/16 "	B / II	5796610210	5796610220	5796610620
End valve	—	tube 1/4 "	—	5792510310	5792510320	5792510720
	—	tube 5/16 "	—	5792610210	5792610220	5792610620
Air conn. module	tube 5/16 "	—	B	5790000092	5790000092	5790000092

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)
other voltages on request

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Valves for valve units, solenoid operated, NO



► Part no. for AC versions (metric)

Description	Port 1	Port 2	Fig. / Item no.	Part no. *	Part no. *
				24 V AC	110 V AC
Inlet valve	tube 8 x 1	tube 6 x 1	A and B / I	5790515220	5790515270
	tube 8 x 1	tube 8 x 1	A and B / I	5790615220	5790615270
Stacking valve	–	tube 6 x 1	B / III	5791515220	5791515270
	–	tube 8 x 1	B / III	5791615220	5791615270
Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	B / II	5796415220	5796415270
	tube 8 x 1	tube 6 x 1	B / II	5796515220	5796515270
	tube 8 x 1	tube 8 x 1	B / II	5796615220	5796615270
End valve	–	tube 6 x 1	–	5792515220	5792515270
	–	tube 8 x 1	–	5792615220	5792615270
Air conn. Module	tube 8 x 1	–	B	5790000092	5790000092

* without electrical connector
other voltages on request

► Part no. for AC versions (inch)

Description	Port 1	Port 2	Fig. / Item no.	Part no. *	Part no. *
				24 V AC	110 V AC
Inlet valve	tube 1/4 "	tube 1/4 "	A and B / I	5790415320	5790415370
	tube 5/16 "	tube 1/4 "	A and B / I	5790515320	5790515370
	tube 5/16 "	tube 5/16 "	A and B / I	5790615220	5790615270
Stacking valve	–	tube 1/4 "	B / III	5791515320	5791515370
	–	tube 5/16 "	B / III	5791615220	5791615270
Stacking valve with add. compressed air port	tube 1/4 "	tube 1/4 "	B / II	5796415320	5796415370
	tube 5/16 "	tube 1/4 "	B / II	5796515320	5796515370
	tube 5/16 "	tube 5/16 "	B / II	5796615220	5796615270
End valve	–	tube 1/4 "	–	5792515320	5792515370
	–	tube 5/16 "	–	5792615220	5792615270
Air conn. Module	tube 5/16 "	–	B	5790000092	5790000092

* without electrical connector
other voltages on request

► Part no. for AC versions (metric)

Description	Port 1	Port 2	Fig. / Item no.	Part no. *	Part no. *
				220/230 V AC	220/230 V AC **
Inlet valve	tube 8 x 1	tube 6 x 1	A and B / I	5790515280	5790515680
	tube 8 x 1	tube 8 x 1	A and B / I	5790615280	5790615680
Stacking valve	–	tube 6 x 1	B / III	5791515280	5791515680
	–	tube 8 x 1	B / III	5791615280	5791615680
Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	B / II	5796415280	5796415680
	tube 8 x 1	tube 6 x 1	B / II	5796515280	5796515680
	tube 8 x 1	tube 8 x 1	B / II	5796615280	5796615680
End valve	–	tube 6 x 1	–	5792515280	5792515680
	–	tube 8 x 1	–	5792615280	5792615680
Air conn. Module	tube 8 x 1	–	B	5790000092	5790000092

* without el. connector ** 220/230 V AC model with LED
other voltages on request

► Part no. for AC versions (inch)




Description	Port 1	Port 2	Fig. / Item no.	Part no. *	Part no. *
				220/230 V AC	220/230 V AC **
Inlet valve	tube 1/4 "	tube 1/4 "	A and B / I	5790415380	5790415780
	tube 5/16 "	tube 1/4 "	A and B / I	5790515380	5790515780
	tube 5/16 "	tube 5/16 "	A and B / I	5790615280	5790615680
Stacking valve	–	tube 1/4 "	B / III	5791515380	5791515780
	–	tube 5/16 "	B / III	5791615280	5791615680
Stacking valve with add. compressed air port	tube 1/4 "	tube 1/4 "	B / II	5796415380	5796415780
	tube 5/16 "	tube 1/4 "	B / II	5796515380	5796515780
	tube 5/16 "	tube 5/16 "	B / II	5796615280	5796615680
End valve	–	tube 1/4 "	–	5792515380	5792515780
	–	tube 5/16 "	–	5792615280	5792615680
Air conn. Module	tube 5/16 "	–	B	5790000092	5790000092

* without el. connector ** 220/230 V AC model with LED
other voltages on request

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Valves for valve units, solenoid operated, NO

AVENTICS®

▲ Accessories (to be ordered separately)						
Accessory	Description	Part no.				
	Silencer, M5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer for port 3	5790005312				
	Set screw	8102060582	50-pcs			
	Nameplates 1–10	8943056312	Pkg qty 5-pcs			
	Nameplates 11–20	8943056322	Pkg qty 5-pcs			
	Star washer	8952203504	100 pcs			
	Filter	8993800164	10 pcs			
	See Connectors page					
	Voltages	24 V DC				
	for BUS- and Multipin-systems					
	Contact bridge with 0,2 m cable	5763503113				
	Contact bridge with 1 m cable	5763513113				
	Voltages	12 V DC	24 V DC	24 V AC	110 V AC	220/230 V AC
	Pilot valve	5420930210	5420930220	5420935220	5420935270	5420935280
	with LED		5420940620 ¹⁾			5420945680

¹⁾ and protected wiring

Fig. A

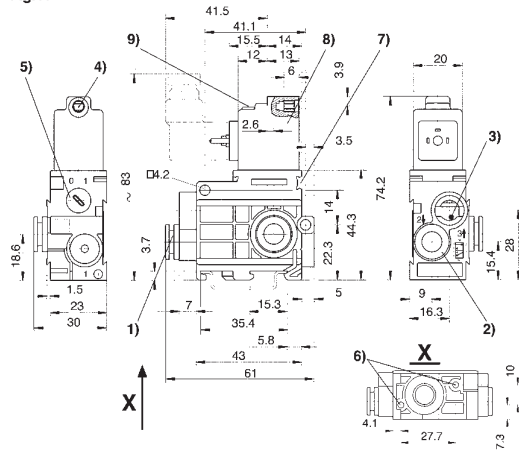
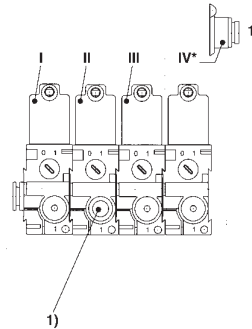


Fig. B



- 1) Port 1 2) Port 2 3) Port 3 exhaust air must not be throttled 4) Pilot exhaust core dia. for M 5 5) Manual override
 6) Pocket hole 6 deep for 3,5 self-tapping screw 7) Mounting space for nameplate 8) Coil can be rotated at 180° intervals 9) LED
 * Air conn. module (Item IV) mounted onto stacking valve (Item II) permits additional air supply from right hand side. End valve (Item III) not required.

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Single valve, solenoid operated, NC, with external pilot



Technical Data

Valve type	Poppet valve	
Working pressure range	Min. 0.5 bar (7 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F) 2 to 10 bar (29 to 145 psi), but ≥ (port 1)	
Pilot pressure range (port 12)	See table	
Nominal flow rate Q _n at 6 bar (87 psi), Δp = 1 bar (15 psi)	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Ambient temperature range	Compressed air, lubricated or non-lubricated	
Medium	0.093 kg (0.205 lbs)	
Weight		
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances	DC ± 10 % AC - 15 % + 10 % AC - 10 % + 15 %	
Power consumption	50 Hz 60 Hz	1.6 W 1.7 W
24 V DC	without LED display with LED display	3.1 / 2.7 VA 2.2 / 1.9 VA
Inrush power	220 V AC 50/60 Hz	B to VDE 0580
Holding power	220 V AC 50/60 Hz	IP 65 to IEC 529 (DIN VDE 0470)(NEMA 4)
Insulation class	100 %	
Protection with el. connector	18 ms	
Duty cycle	16 ms	
Switching times	t _F fill t _E exhaust	



Application area

Suitable for all mechanical control systems, especially corrosion proof or lightweight applications.
Attention: Application for BUS-communication with contact bridge on request.

Part no. (metric)

Qn [l/min] (Cv)	Port 1	Port 2	Port 12	Voltages		Part no.*
				12 V DC	24 V DC	
850 (0.85)	tube 8 x 1 (5/16")	tube 8 x 1 (5/16")	tube 4 x 1 (5/32")	24 V DC **	5794670210	
				24 V DC **	5794670220	
				24 V AC	5794670620	
				24 V AC	5794675220	
				110 V AC	5794675270	
520 (0.52)	tube 6 x 1	tube 6 x 1	tube 4 x 1	220/230 V AC	5794675280	
				220/230 V AC***	5794675680	
				12 V DC	5794470210	
				24 V DC	5794470220	
				24 V DC **	5794470620	
520 (0.52)	tube 6 x 1	tube 6 x 1	tube 4 x 1	24 V AC	5794475220	
				110 V AC	5794475270	
				220/230 V AC	5794475280	
				220/230 V AC***	5794475680	
				220/230 V AC***	5794475680	

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)
*** 220/ 230 V AC model with LED
other voltages on request

Part no. (inch)

Qn [l/min] (Cv)	Port 1	Port 2	Voltages	Part no. *	
				12 V DC	24 V DC
520 (0.52)	tube 1/4"	tube 1/4"	tube 5/32"	24 V DC	5794470310
				24 V DC	5794470320
				24 V DC**	5794470720
				24 V AC	5794475320
				110 V AC	5794475370
520 (0.52)	tube 1/4"	tube 1/4"	tube 5/32"	220/230 V AC	5794475380
				220/230 V AC***	5794475780
				220/230 V AC***	5794475780



* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)
*** 220/ 230 V AC model with LED
other voltages on request

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

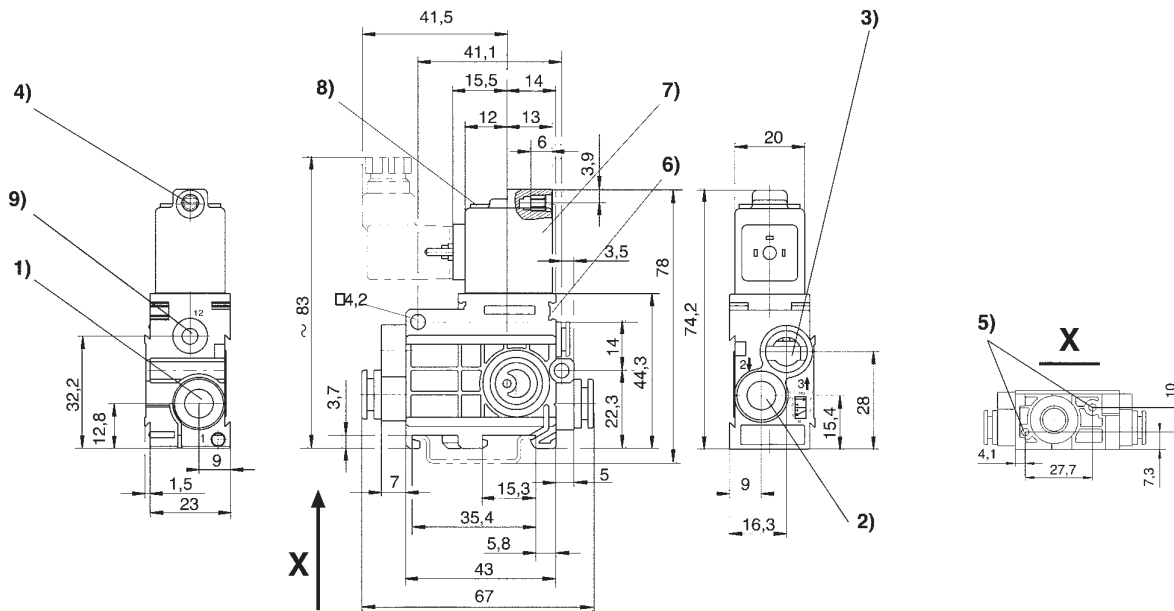
3/2 Single valve, solenoid operated, NC, with external pilot



▲ Accessories (to be ordered separately)

Accessory	Description	Part no.				
	Silencer, M 5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer for port 3	5790005312				
	Set screw	8102060582	50-pcs			
	Nameplates 1-10	8943056312	Pkg qty 5-pcs			
	Nameplates 11-20	8943056322	Pkg qty 5-pcs			
	Star washer	8952203504	100 pcs			
Filter	8993800164	10 pcs				
	See Connectors page					
	Voltages	12 V DC	24 V DC	24 V AC	110 V AC	220/230 V AC
	Pilot valve with LED	5420930210	5420930220 5420940620 ¹⁾	5420935220	5420935270	5420935280 5420945680

¹⁾ and protected wiring



- 1) Port 1 2) Port 2 3) Port 3 exhaust air must not be throttled 4) Pilot exhaust core dia. for M 5 5) Pocket hole 6 deep for 3,5 self-tapping screw
6) Mounting space for nameplate 7) Coil can be rotated at 180° intervals 8) LED 9) Port 12

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Valves for valve units, solenoid operated, NC, with external pilot



Technical Data

Valve type	Poppet valve	
Working pressure range	Min. 0.5 bar (7 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)	
Pilot pressure range (port 12)	2 to 10 bar (29 to 145 psi), but ≥ (port 1)	
Nominal flow rate Q _n at 6 bar (87 psi), Δp = 1 bar (15 psi)	520 l/min (0.52 Cv) for tube 6 x 1 850 l/min (0.85 Cv) for tube 8 x 1	
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Weight	0.093 kg (0.205 lbs)	
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances		DC ± 10 % AC - 15 % + 10 % AC - 10 % + 15 %
Power consumption	50 Hz 60 Hz	1.6 W 1.7 W
24 V DC	without LED display with LED display	3.1 / 2.7 VA 2.2 / 1.9 VA
Inrush power	220 V AC 50/60 Hz	B to VDE 0580
Holding power	220 V AC 50/60 Hz	IP 65 to IEC 529 (DIN VDE 0470)(NEMA 4)
Insulation class		100 %
Protection with el. connector		18 ms
Duty cycle		16 ms
Switching times	t _f fill t _e exhaust	



Application area

Suitable for all mechanical control systems, especially corrosion proof or lightweight applications.
Attention: application for BUS-control with contact bridge on request.

Part no. for DC versions (metric)

	Description	Port 1	Port 2	Port 12	Fig. / Item no.	Part no.* 12 V DC	Part no.* 24 V DC	Part no.* 24 V DC**
	Inlet valve	tube 8 x 1	tube 6 x 1	tube 4 x 1	A and B / I	5790570210	5790570220	5790570620
		tube 8 x 1	tube 8 x 1	tube 4 x 1	A and B / I	5790670210	5790670220	5790670620
	Stacking valve	–	tube 6 x 1	tube 4 x 1	B / II	5791570210	5791570220	5791570620
		–	tube 8 x 1	tube 4 x 1	B / II	5791670210	5791670220	5791670620
	Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	tube 4 x 1	–	5796470210	5796470220	5796470620
		tube 8 x 1	tube 6 x 1	tube 4 x 1	–	5796570210	5796570220	5796570620
		tube 8 x 1	tube 8 x 1	tube 4 x 1	–	5796670210	5796670220	5796670620
	End valve	–	tube 6 x 1	tube 4 x 1	B / III	5792570210	5792570220	5792570620
		–	tube 8 x 1	tube 4 x 1	B / III	5792670210	5792670220	5792670620
	Air conn. module	tube 8 x 1	–	–	B / IV	5790000092	5790000092	5790000092

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)
other voltages on request

Part no. for DC versions (inch)

	Description	Port 1	Port 2	Port 12	Fig. / Item no.	Part no.* 12 V DC	Part no.* 24 V DC	Part no.* 24 V DC**
	Inlet valve	tube 1/4 "	tube 1/4 "	tube 5/32 "	A and B / I	5790470310	5790470320	5790470720
		tube 5/16 "	tube 1/4 "	tube 5/32 "	A and B / I	5790570310	5790570320	5790570720
		tube 5/16 "	tube 5/16 "	tube 5/32 "	A and B / I	5790670210	5790670220	5790670620
	Stacking valve	–	tube 1/4 "	tube 5/32 "	B / II	5791570310	5791570320	5791570720
		–	tube 5/16 "	tube 5/32 "	B / II	5791670220	5791670220	5791670620
	Stacking valve with add. compressed air port	tube 1/4 "	tube 1/4 "	tube 5/32 "	–	5796470310	5796470320	5796470720
		tube 5/16 "	tube 1/4 "	tube 5/32 "	–	5796570310	5796570320	5796570720
		tube 5/16 "	tube 5/16 "	tube 5/32 "	–	5796670210	5796670220	5796670620
	End valve	–	tube 1/4 "	tube 5/32 "	B / III	5792570310	5792570320	5792570720
		–	tube 5/16 "	tube 5/32 "	B / III	5792670210	5792670220	5792670620
	Air conn. module	tube 5/16 "	–	–	B / IV	5790000092	5790000092	5790000092

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)
other voltages on request

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Valves for valve units, solenoid operated, NC, with external pilot



Part no. for AC versions (metric)

Description	Port 1	Port 2	Port 12	Fig. / Item no.	Part no. *	Part no. *
					24 V AC	110 V AC
Inlet valve	tube 8 x 1	tube 6 x 1	tube 4 x 1	A and B / I	5790575220	5790575270
	tube 8 x 1	tube 8 x 1	tube 4 x 1	A and B / I	5790675220	5790675270
Stacking valve	–	tube 6 x 1	tube 4 x 1	B / II	5791575220	5791575270
	–	tube 8 x 1	tube 4 x 1	B / II	5791675220	5791675270
Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	tube 4 x 1	–	5796475220	5796475270
	tube 8 x 1	tube 6 x 1	tube 4 x 1	–	5796575220	5796575270
	tube 8 x 1	tube 8 x 1	tube 4 x 1	–	5796675220	5796675270
End valve	–	tube 6 x 1	tube 4 x 1	B / III	5792575220	5792575270
	–	tube 8 x 1	tube 4 x 1	B / III	5792675220	5792675270
Air conn. Module	tube 8 x 1	–	–	B / IV	5790000092	5790000092

* without electrical connector

Part no. for AC versions (inch)

Description	Port 1	Port 2	Port 12	Fig. / Item no.	Part no. *	Part no. *
					24 V AC	110 V AC
Inlet valve	tube 1/4 "	tube 1/4 "	tube 5/32 "	A and B / I	5790475320	5790475370
	tube 5/16 "	tube 1/4 "	tube 5/32 "	A and B / I	5790575320	5790575370
	tube 5/16 "	tube 5/16 "	tube 5/32 "	A and B / I	5790675220	5790675270
Stacking valve	–	tube 1/4 "	tube 5/32 "	B / II	5791575320	5791575370
	–	tube 5/16 "	tube 5/32 "	B / II	5791675220	5791675270
Stacking valve with add. compressed air port	tube 1/4 "	tube 1/4 "	tube 5/32 "	–	5796475320	5796475370
	tube 5/16 "	tube 1/4 "	tube 5/32 "	–	5796575320	5796575370
	tube 5/16 "	tube 5/16 "	tube 5/32 "	–	5796675220	5796675270
End valve	–	tube 1/4 "	tube 5/32 "	B / III	5792575320	5792575370
	–	tube 5/16 "	tube 5/32 "	B / III	5792675220	5792675270
Air conn. Module	tube 5/16 "	–	–	B / IV	5790000092	5790000092

* without electrical connector

Part no. for AC versions (metric)

Description	Port 1	Port 2	Port 12	Fig. / Item no.	Part no. *	Part no. *
					220/230 V AC	220/230 V AC **
Inlet valve	tube 8 x 1	tube 6 x 1	tube 4 x 1	A and B / I	5790575280	5790575680
	tube 8 x 1	tube 8 x 1	tube 4 x 1	A and B / I	5790675280	5790675680
Stacking valve	–	tube 6 x 1	tube 4 x 1	B / II	5791575280	5791575680
	–	tube 8 x 1	tube 4 x 1	B / II	5791675280	5791675680
Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	tube 4 x 1	–	5796475280	5796475680
	tube 8 x 1	tube 6 x 1	tube 4 x 1	–	5796575280	5796575680
	tube 8 x 1	tube 8 x 1	tube 4 x 1	–	5796675280	5796675680
End valve	–	tube 6 x 1	tube 4 x 1	B / III	5792575280	5792575680
	–	tube 8 x 1	tube 4 x 1	B / III	5792675280	5792675680
Air conn. module	tube 8 x 1	–	–	B / IV	5790000092	5790000092

* without el. connector ** 220/230 V AC model with LED
other voltages on request

Part no. for AC versions (inch)

Description	Port 1	Port 2	Port 12	Fig. / Item no.	Part no. *	Part no. *
					220/230 V AC	220/230 V AC **
Inlet valve	tube 1/4 "	tube 1/4 "	tube 5/32 "	A and B / I	5790475380	5790475780
	tube 5/16 "	tube 1/4 "	tube 5/32 "	A and B / I	5790575380	5790575780
	tube 5/16 "	tube 5/16 "	tube 5/32 "	A and B / I	5790675280	5790675680
Stacking valve	–	tube 1/4 "	tube 5/32 "	B / II	5791575380	5791575780
	–	tube 5/16 "	tube 5/32 "	B / II	5791675280	5791675680
Stacking valve with add. compressed air port	tube 1/4 "	tube 1/4 "	tube 5/32 "	–	5796475380	5796475780
	tube 5/16 "	tube 1/4 "	tube 5/32 "	–	5796575380	5796575780
	tube 5/16 "	tube 5/16 "	tube 5/32 "	–	5796675280	5796675680
End valve	–	tube 1/4 "	tube 5/32 "	B / III	5792575380	5792575780
	–	tube 5/16 "	tube 5/32 "	B / III	5792675280	5792675680
Air conn. module	tube 5/16 "	–	–	B / IV	5790000092	5790000092



* without el. connector ** 220/230 V AC model with LED
other voltages on request

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

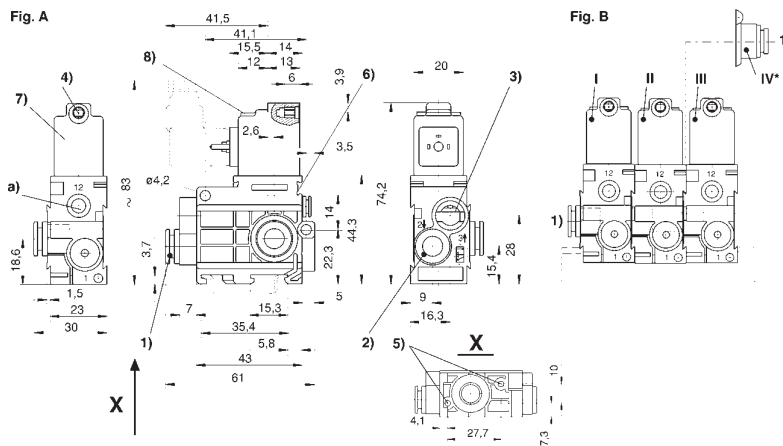
3/2 Valves for valve units, solenoid operated, NC, with external pilot



▲ Accessories (to be ordered separately)

Accessory	Description	Part no.				
	Silencer, M5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer for port 3	5790005312				
	Set screw	8102060582	50-pcs			
	Nameplates 1–10	8943056312	Pkg qty 5-pcs			
	Nameplates 11–20	8943056322	Pkg qty 5-pcs			
	Star washer	8952203504	100 pcs			
	Filter	8993800164	10 pcs			
	See Connectors page					
	Voltages	12 V DC	24 V DC	24 V AC	110 V AC	220/230 V AC
	Pilot valve with LED	5420930210	5420930220 5420940620 ¹⁾	5420935220	5420935270	5420935280 5420945680

¹⁾ and protected wiring



- 1) Port 1 2) Port 2 3) Port 3 exhaust air must not be throttled 4) Pilot exhaust core dia. for M 5 5) Pocket hole 6 deep for 3,5 self-tapping screw
 6) Mounting space for nameplate 7) Coil can be rotated at 180° intervals 8) LED 9) Port 12
 * Air conn. module (Item IV) mounted onto stacking valve (Item II) permits additional air supply from right hand side. End valve (Item III) not required.

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Single valve, solenoid operated, NO, with external pilot

AVENTICS®



Technical Data

Valve type	Poppet valve	
Working pressure range	Min. 0.5 bar (7 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F) 2 to 10 bar (29 to 145 psi), but ≥ (port 1)	
Pilot pressure range (port 12)	See table	
Nominal flow rate Q _n at 6 bar (87 psi), Δp = 1 bar (15 psi)	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Ambient temperature range	Compressed air, lubricated or non-lubricated	
Medium	0.093 kg (0.205 lbs)	
Weight		
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances		DC ± 10 % AC - 15 % + 10 % AC - 10 % + 15 %
Power consumption	50 Hz 60 Hz	1.6 W 1.7 W
24 V DC	without LED display with LED display	3.1 / 2.7 VA 2.2 / 1.9 VA
Inrush power	220 V AC 50/60 Hz	B to VDE 0580
Holding power	220 V AC 50/60 Hz	IP 65 to IEC 529 (DIN VDE 0470)(NEMA 4)
Insulation class		100 %
Protection with el. connector		18 ms
Duty cycle		16 ms
Switching times	t _F fill t _E exhaust	



Application area

Suitable for all mechanical control systems, especially corrosion proof or lightweight applications.
Attention: Application for BUS-communication with contact bridge on request.

Part no. (metric)

	Qn [l/min] (Cv)	Port 1	Port 2	Port 12	Voltages	Part no.*
	600 (0.60)	tube 8 x 1 (5/16")	tube 8 x 1 (5/16")	tube 4 x 1 (5/32")	12 V DC	5794620210
					24 V DC	5794620220
					24 V DC **	5794620620
					24 V AC	5794625220
					110 V AC	5794625270
					220/230 V AC	5794625280
					220/230 V AC***	5794625680
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 4 x 1	12 V DC	5794420210
					24 V DC	5794420220
					24 V DC **	5794420620
					24 V AC	5794425220
					110 V AC	5794425270
					220/230 V AC	5794425280
					220/230 V AC***	5794425680

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)

*** 220/ 230 V AC model with LED

other voltages on request

Part no. (inch)

	Qn [l/min] (Cv)	Port 1	Port 2	Port 12	Voltages	Part no.*
	520 (0.52)	tube 1/4 "	tube 1/4 "	tube 5/32 "	12 V DC	5794420310
					24 V DC	5794420320
					24 V DC**	5794420720
					24 V AC	5794425320
					110 V AC	5794425370
					220/230 V AC	5794425380
					220/230 V AC ***	5794425780

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)

*** 220/ 230 V AC model with LED



other voltages on request

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

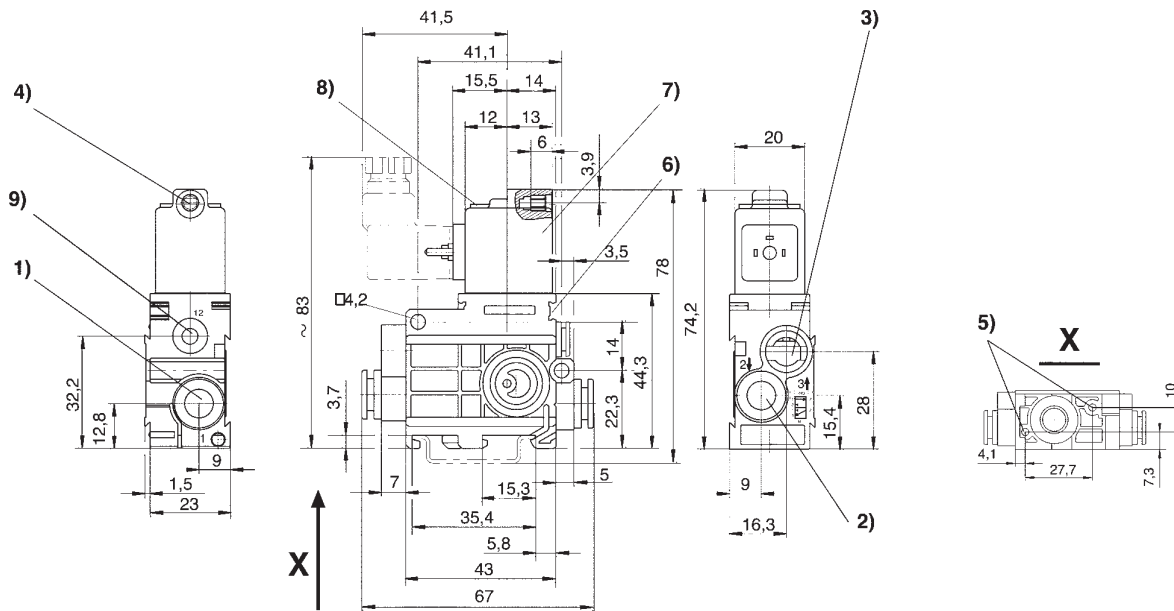
3/2 Single valve, solenoid operated, NO, with external pilot



▲ Accessories (to be ordered separately)

Accessory	Description	Part no.				
	Silencer, M 5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer for port 3	5790005312				
	Set screw	8102060582	50-pcs			
	Nameplates 1–10	8943056312	Pkg qty 5-pcs			
	Nameplates 11–20	8943056322	Pkg qty 5-pcs			
	Star washer	8952203504	100 pcs			
	Filter	8993800164	10 pcs			
	See Connectors page					
	Voltages	12 V DC	24 V DC	24 V AC	110 V AC	220/230 V AC
	Pilot valve	5420930210	5420930220	5420935220	5420935270	5420935280
	with LED		5420940620 ¹⁾			5420945680

¹⁾ and protected wiring



- 1) Port 1. 2) Port 2. 3) Port 3 exhaust air must not be throttled. 4) Pilot exhaust core dia. for M 5. 5) Pocket hole 6 deep for 3,5 self-tapping screw. 6) Mounting space for name plate. 7) Coil can be rotated at 180° intervals. 8) LED. 9) Port 12.

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

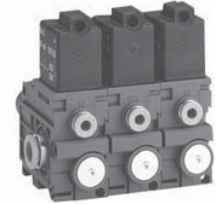
3/2 Valves for valve units, solenoid operated, NO, with external pilot

AVENTICS®



Technical Data

Valve type	Poppet valve	
Working pressure range	Min. 0.5 bar (7 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)	
Pilot pressure range (port 12)	2 to 10 bar (29 to 145 psi), but ≥ (port 1)	
Nominal flow rate Q _n at 6 bar (87 psi), Δp = 1 bar (15 psi)	600 l/min (0.60 Cv)	
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Weight	0.093 kg (0.205 lbs)	
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances		DC ± 10 % AC - 15 % + 10 % AC - 10 % + 15 %
Power consumption	without LED display with LED display	1.6 W 1.7 W
24 V DC		
Inrush power	220 V AC 50/60 Hz	3.1 / 2.7 VA
Holding power	220 V AC 50/60 Hz	2.2 / 1.9 VA
Insulation class		B to VDE 0580
Protection with el. connector		IP 65 to IEC 529 (DIN VDE 0470)(NEMA 4)
Duty cycle		100 %
Switching times	t _F fill t _E exhaust	18 ms 16 ms



Application area

Suitable for all mechanical control systems, especially corrosion proof or lightweight applications.
Attention: Application for BUS-communication with contact bridge on request.

Part no. for DC versions (metric)

Description	Port 1	Port 2	Port 12	Fig. / Item no.	Part no. * 12 V DC	Part no. * 24 V DC	Part no. * 24 V DC**
Inlet valve	tube 8 x 1	tube 6 x 1	tube 4 x 1	A and B / I	5790520210	5790520220	5790520620
	tube 8 x 1	tube 8 x 1	tube 4 x 1	A and B / I	5790620210	5790620220	5790620620
Stacking valve	–	tube 6 x 1	tube 4 x 1	B / II	5791520210	5791520220	5791520620
	–	tube 8 x 1	tube 4 x 1	B / II	5791620210	5791620220	5791620620
Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	tube 4 x 1	–	5796420210	5796420220	5796420620
	tube 8 x 1	tube 6 x 1	tube 4 x 1	–	5796520210	5796520220	5796520620
End valve	tube 8 x 1	tube 8 x 1	tube 4 x 1	–	5796620210	5796620220	5796620620
	–	tube 6 x 1	tube 4 x 1	B / III	5792520210	5792520220	5792520620
Air conn. module	–	tube 8 x 1	tube 4 x 1	B / III	5792620210	5792620220	5792620620
	tube 8 x 1	–	–	B / IV	5790000092	5790000092	5790000092

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)
other voltages on request

Part no. for DC versions (inch)

Description	Port 1	Port 2	Port 12	Fig. / Item no.	Part no. * 12 V DC	Part no. * 24 V DC	Part no. * 24 V DC**
Inlet valve	tube 1/4 "	tube 1/4 "	tube 5/32 "	A and B / I	5790420310	5790420320	5790420720
	tube 5/16 "	tube 1/4 "	tube 5/32 "	A and B / I	5790520310	5790520320	5790520720
	tube 5/16 "	tube 5/16 "	tube 5/32 "	A and B / I	5790620210	5790620220	5790620620
Stacking valve	–	tube 1/4 "	tube 5/32 "	B / II	5791520310	5791520320	5791520720
	–	tube 5/16 "	tube 5/32 "	B / II	5791620210	5791620220	5791620620
Stacking valve with add. compressed air port	tube 1/4 "	tube 1/4 "	tube 5/32 "	–	5796420310	5796420320	5796420720
	tube 5/16 "	tube 1/4 "	tube 5/32 "	–	5796520310	5796520320	5796520720
	tube 5/16 "	tube 5/16 "	tube 5/32 "	–	5796620210	5796620220	5796620620
End valve	–	tube 1/4 "	tube 5/32 "	B / III	5792520310	5792520320	5792520720
	–	tube 5/16 "	tube 5/32 "	B / III	5792620210	5792620220	5792620620
Air conn. module	tube 5/16 "	–	–	B / IV	5790000092	5790000092	5790000092

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)
other voltages on request

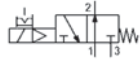
3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Valves for valve units, solenoid operated, NO, with external pilot



Part no. for AC versions (metric)

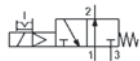
Description	Port 1	Port 2	Port 12	Fig. / Item no.	Part no. *	Part no. *
					24 V DC	110 V AC
Inlet valve	tube 8 x 1	tube 6 x 1	tube 4 x 1	A and B / I	5790525220	5790525270
	tube 8 x 1	tube 8 x 1	tube 4 x 1	A and B / I	5790625220	5790625270
Stacking valve	–	tube 6 x 1	tube 4 x 1	B / II	5791525220	5791525270
	–	tube 8 x 1	tube 4 x 1	B / II	5791625220	5791625270
Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	tube 4 x 1	–	5796425220	5796425270
	tube 8 x 1	tube 6 x 1	tube 4 x 1	–	5796525220	5796525270
	tube 8 x 1	tube 8 x 1	tube 4 x 1	–	5796625220	5796625270
	–	–	–	–	–	–
End valve	–	tube 6 x 1	tube 4 x 1	B / III	5792525220	5792525270
	–	tube 8 x 1	tube 4 x 1	B / III	5792625220	5792625270
Air conn. module	tube 8 x 1	–	–	B / IV	5790000092	5790000092



* without el. connector
other voltages on request

Part no. for AC versions (inch)

Description	Port 1	Port 2	Port 12	Fig. / Item no.	Part no. *	Part no. *
					24 V DC	110 V AC
Inlet valve	tube 1/4 "	tube 1/4 "	tube 5/32 "	A and B / I	5790425320	5790425370
	tube 5/16 "	tube 1/4 "	tube 5/32 "	A and B / I	5790525320	5790525370
	tube 5/16 "	tube 5/16 "	tube 5/32 "	A and B / I	5790625220	5790625270
Stacking valve	–	tube 1/4 "	tube 5/32 "	B / II	5791525320	5791525370
	–	tube 5/16 "	tube 5/32 "	B / II	5791625220	5791625270
Stacking valve with add. compressed air port	tube 1/4 "	tube 1/4 "	tube 5/32 "	–	5796425320	5796425370
	tube 5/16 "	tube 1/4 "	tube 5/32 "	–	5796525320	5796525370
	tube 5/16 "	tube 5/16 "	tube 5/32 "	–	5796625220	5796625270
End valve	–	tube 1/4 "	tube 5/32 "	B / III	5792525320	5792525370
	–	tube 5/16 "	tube 5/32 "	B / III	5792625220	5792625270
Air conn. module	tube 5/16 "	–	–	B / IV	5790000092	5790000092



* without el. connector
other voltages on request

Part no. for AC versions (metric)

Description	Port 1	Port 2	Port 12	Fig. / Item no.	Part no. *	Part no. *
					220/230 V AC	220/230 V AC **
Inlet valve	tube 8 x 1	tube 6 x 1	tube 4 x 1	A and B / I	5790525280	5790525680
	tube 8 x 1	tube 8 x 1	tube 4 x 1	A and B / I	5790625280	5790625680
Stacking valve	–	tube 6 x 1	tube 4 x 1	B / II	5791525280	5791525680
	–	tube 8 x 1	tube 4 x 1	B / II	5791625280	5791625680
Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	tube 4 x 1	–	5796425280	5796425680
	tube 8 x 1	tube 6 x 1	tube 4 x 1	–	5796525280	5796525680
	tube 8 x 1	tube 8 x 1	tube 4 x 1	–	5796625280	5796625680
	–	–	–	–	–	–
End valve	–	tube 6 x 1	tube 4 x 1	B / III	5792525280	5792525680
	–	tube 8 x 1	tube 4 x 1	B / III	5792625280	5792625680
Air conn. module	tube 8 x 1	–	–	B / IV	5790000092	5790000092



* without el. connector ** 220/230 V AC model with LED
other voltages on request

Part no. for AC versions (inch)

Description	Port 1	Port 2	Port 12	Fig. / Item no.	Part no. *	Part no. *
					220/230 V AC	220/230 V AC **
Inlet valve	tube 1/4 "	tube 1/4 "	tube 5/32 "	A and B / I	5790425380	5790425780
	tube 5/16 "	tube 1/4 "	tube 5/32 "	A and B / I	5790525380	5790525780
	tube 5/16 "	tube 5/16 "	tube 5/32 "	A and B / I	5790625280	5790625680
Stacking valve	–	tube 1/4 "	tube 5/32 "	B / II	5791525380	5791525780
	–	tube 5/16 "	tube 5/32 "	B / II	5791625280	5791625680
Stacking valve with add. compressed air port	tube 1/4 "	tube 1/4 "	tube 5/32 "	–	5796425380	5796425780
	tube 5/16 "	tube 1/4 "	tube 5/32 "	–	5796525380	5796525780
	tube 5/16 "	tube 5/16 "	tube 5/32 "	–	5796625280	5796625680
End valve	–	tube 1/4 "	tube 5/32 "	B / III	5792525380	5792525780
	–	tube 5/16 "	tube 5/32 "	B / III	5792625280	5792625680
Air conn. module	tube 5/16 "	–	–	B / IV	5790000092	5790000092





* without el. connector ** 220/230 V AC model with LED
other voltages on request

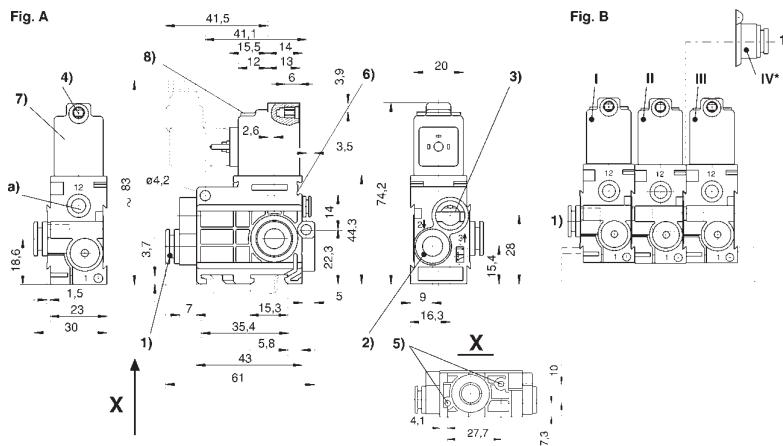
3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

3/2 Valves for valve units, solenoid operated, NO, with external pilot



▲ Accessories (to be ordered separately)						
Accessory	Description	Part no.				
	Silencer, M 5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer for port 3	5790005312				
	Set screw	8102060582		50-pcs		
	Nameplates 1–10	8943056312		Pkg qty 5-pcs		
	Nameplates 11–20	8943056322		Pkg qty 5-pcs		
	Star washer	8952203504		100 pcs		
	Filter	8993800164		10 pcs		
	See Connectors page					
	Voltages	12 V DC	24 V DC	24 V AC	110 V AC	220/230 V AC
	Pilot valve	5420930210	5420930220	5420935220	5420935270	5420935280
	with LED		5420940620 ¹⁾			5420945680

¹⁾ and protected wiring



- 1) Port 1 2) Port 2 3) Port 3 exhaust air must not be throttled 4) Pilot exhaust core dia. for M 5 5) Pocket hole 6 deep for 3,5 self-tapping screw
 6) Mounting space for nameplate 7) Coil can be rotated at 180° intervals 8) LED 9) Port 12
 * Air conn. module (Item IV) mounted onto stacking valve (Item II) permits additional air supply from right hand side. End valve (Item III) not required.

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

5/2 Single valve, solenoid operated

AVENTICS®



Technical Data

Valve type	Poppet valve	
Working pressure range	Min. 2 bar (29 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)	
Nominal flow rate at 6 bar (87 psi), Δp = 1 bar (15 psi)	Qn	See table
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Weight	0.133 kg (0.293 lbs)	
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances		DC ± 10 % AC - 15 % + 10 % AC - 10 % + 15 %
Power consumption	50 Hz 60 Hz	1.6 W 1.7 W
24 V DC	without LED display with LED display	3.1 / 2.7 VA 2.2 / 1.9 VA
Inrush power	220 V AC 50/60 Hz	B to VDE 0580
Holding power	220 V AC 50/60 Hz	IP 65 to IEC 529 (DIN VDE 0470) (NEMA 4)
Insulation class		100 %
Protection with el. connector		27 ms
Duty cycle		28 ms
Switching times	t _f fill t _E exhaust	



Application area

Suitable for all mechanical control systems, especially corrosion proof or lightweight applications.

Part no. (metric)

	Qn [l/min] (Cv)	Port 1	Port 2 and 4	Voltages	Part no. *
	600 (0.60)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	12 V DC	5794900210
				24 V DC	5794900220
				24 V DC **	5794900620
				24 V AC	5794905220
				110 V AC	5794905270
				220/230 V AC	5794905280
				220/230 V AC***	5794905680
	520 (0.52)	tube 6 x 1	tube 6 x 1	12 V DC	5794700210
				24 V DC	5794700220
				24 V DC **	5794700620
				24 V AC	5794705220
				110 V AC	5794705270
				220/230 V AC	5794705280
				220/230 V AC***	5794705680

* Without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)
*** 220/ 230 V AC model with LED
other voltages on request

Part no. (inch)

	Qn [l/min] (Cv)	Port 1	Port 2 and 4	Voltages	Part no. *
	520 (0.52)	tube 1/4 "	tube 1/4 "	12 V DC	5794700310
				24 V DC	5794700320
				24 V DC **	5794700720
				24 V AC	5794705320
				110 V AC	5794705370
				220/230 V AC	5794705380
				220/230 V AC***	5794705780




* Without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)
*** 220/ 230 V AC model with LED
other voltages on request

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

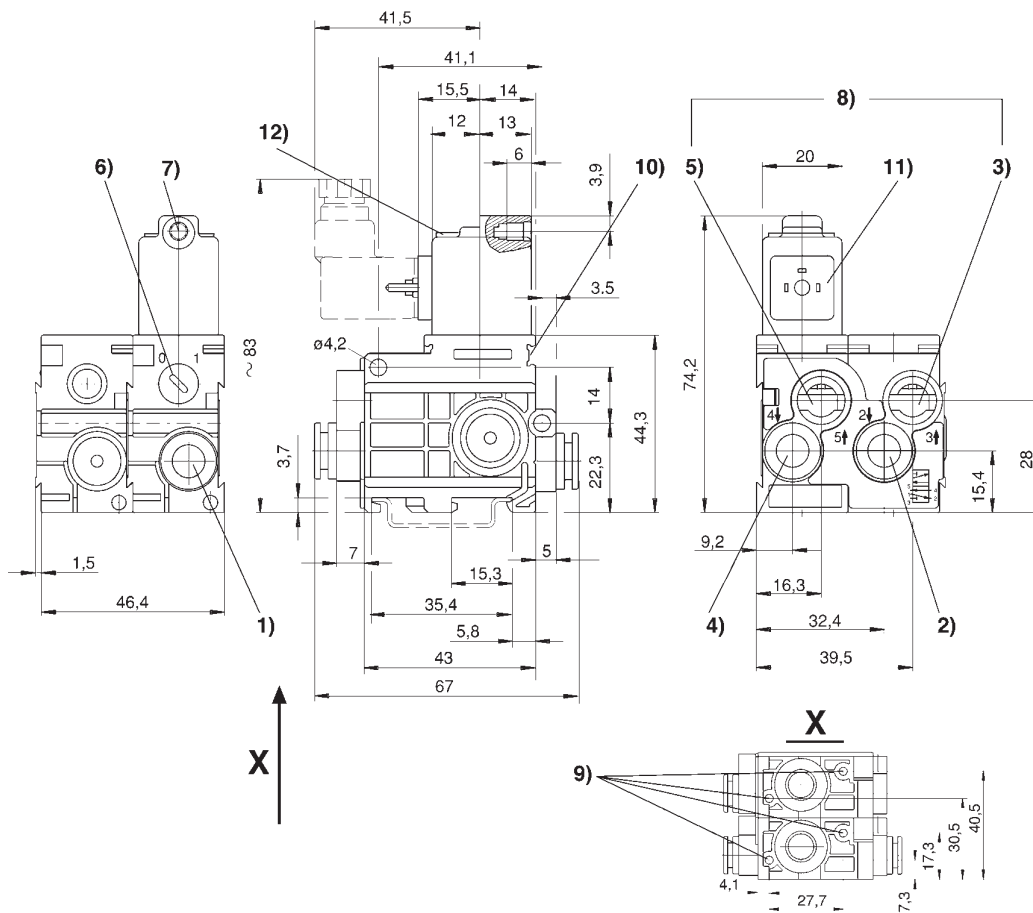
5/2 Single valve, solenoid operated

AVENTICS®

▲ Accessories (to be ordered separately)

Accessory	Description	Part no.				
	Silencer, M 5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer for port 3	5790005312				
	Set screw	8102060582	50-pcs			
	Nameplates 1–10	8943056312	Pkg qty 5-pcs			
	Nameplates 11–20	8943056322	Pkg qty 5-pcs			
	Star washer	8952203504	100 pcs			
	Filter	8993800164	10 pcs			
	See Connectors page					
	Voltages for BUS- and Multipin-systems Contact bridge with 0,2 m cable Contact bridge with 1 m cable	24 V DC 5763503113 5763513113				
	Voltages Pilot valve with LED	12 V DC 5420930210	24 V DC 5420930220 5420940620 ¹⁾	24 V AC 5420935220	110 V AC 5420935270	220/230 V AC 5420935280 5420945680

¹⁾ and protected wiring



- 1) Port 1. 2) Port 2. 3) Port 3. 4) Port 4. 5) Port 5. 6) Manual override. 7) Pilot exhaust core dia. for M 5.
8) Exhaust air must not be throttled. 9) Pocket hole 6 deep for 3.5 self-tapping screw.
10) Mounting space for nameplate. 11) Coil can be rotated at 180° intervals. 12) LED.

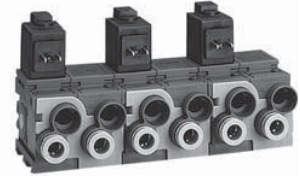
3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

5/2 Valves for valve units, solenoid operated



Technical Data

Valve type	Poppet valve	
Working pressure range	Min. 2 bar (29 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)	
Nominal flow rate Qn at 6 bar (87 psi), Δp = 1 bar (15 psi)	For tube 6x1 or 1/4 " , 520 l/min (0.52 Cv) For tube 8x1 or 5/16 " , 600 l/min (0.60 Cv)	
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Weight	0.133 kg (0.293 lbs)	
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances		DC ± 10 % AC - 15 % + 10 %
Power consumption	50 Hz 60 Hz	AC - 10 % + 15 %
24 V DC	without LED display with LED display	1.6 W 1.7 W
Inrush power	220 V AC 50/60 Hz	3.1 / 2.7 VA
Holding power	220 V AC 50/60 Hz	2.2 / 1.9 VA
Insulation class		B to VDE 0580
Protection with el. connector		IP 65 to IEC 529 (DIN VDE 0470) (NEMA 4)
Duty cycle		100 %
Switching times	t _f fill t _E exhaust	27 ms 28 ms



Application area

Suitable for all mechanical control systems, especially corrosion proof or lightweight applications.

Part no. for DC versions (metric)

Description	Port 1	Port 2 and 4	Fig. / Item no.	Part no. * 12 V DC	Part no. * 24 V DC	Part no. * 24 V DC**
Inlet valve	tube 8 x 1	tube 6 x 1	A and B / I	5790800210	5790800220	5790800620
	tube 8 x 1	tube 8 x 1	A and B / II	5790900210	5790900220	5790900620
Stacking valve	–	tube 6 x 1	B / V	5791800210	5791800220	5791800620
	–	tube 8 x 1	B / V	5791900210	5791900220	5791900620
Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	B / II	5796700210	5796700220	5796700620
	tube 8 x 1	tube 6 x 1	B / II	5796800210	5796800220	5796800620
End valve	tube 8 x 1	tube 8 x 1	B / II	5796900210	5796900220	5796900620
	–	tube 6 x 1	B / III	5792800210	5792800220	5792800620
Air conn. module	–	tube 8 x 1	B / III	5792900210	5792900220	5792900620
	tube 8 x 1	–	B / IV	5790000092	5790000092	5790000092

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection) other voltages on request

Part no. for DC versions (inch)

Description	Port 1	Port 2 and 4	Fig. / Item no.	Part no. * 12 V DC	Part no. * 24 V DC	Part no. * 24 V DC**
Inlet valve	tube 1/4 "	tube 1/4 "	A and B / I	5790700310	5790700320	5790700720
	tube 5/16 "	tube 1/4 "	A and B / I	5790800310	5790800320	5790800720
Stacking valve	tube 5/16 "	tube 5/16 "	A and B / I	5790900210	5790900220	5790900620
	–	tube 1/4 "	B / V	5791800310	5791800320	5791800720
Stacking valve with add. compressed air port	–	tube 5/16 "	B / V	5791900210	5791900220	5791900620
	tube 1/4 "	tube 1/4 "	B / II	5796700310	5796700320	5796700720
End valve	tube 5/16 "	tube 1/4 "	B / II	5796800310	5796800320	5796800720
	tube 5/16 "	tube 5/16 "	B / II	5796900210	5796900220	5796900620
Air conn. module	–	tube 1/4 "	B / III	5792800310	5792800320	5792800720
	–	tube 5/16 "	B / III	5792900210	5792900220	5792900620
	tube 5/16 "	–	B / IV	5790000092	5790000092	5790000092

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection) other voltages on request

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

5/2 Valves for valve units, solenoid operated



Part no. for AC versions (metric)

Description	Port 1	Port 2 and 4	Fig. / Item no.	Part no. * 24 V AC	Part no. * 110 V AC
Inlet valve	tube 8 x 1	tube 6 x 1	A and B / I	5790805220	5790805270
	tube 8 x 1	tube 8 x 1	A and B / I	5790905220	5790905270
Stacking valve	–	tube 6 x 1	B / V	5791805220	5791805270
	–	tube 8 x 1	B / V	5791905220	5791905270
Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	B / II	5796705220	5796705270
	tube 8 x 1	tube 6 x 1	B / II	5796805220	5796805270
End valve	–	tube 6 x 1	B / III	5792805220	5792805270
	–	tube 8 x 1	B / III	5792905220	5792905270
Air conn. module	tube 8 x 1	–	B / IV	5790000092	5790000092

* without el. connector
other voltages on request

Part no. for AC versions (inch)

Description	Port 1	Port 2 and 4	Fig. / Item no.	Part no. * 24 V AC	Part no. * 110 V AC
Inlet valve	tube 1/4 "	tube 1/4 "	A and B / I	5790705320	5790705370
	tube 5/16 "	tube 1/4 "	A and B / I	5790805320	5790805370
	tube 5/16 "	tube 5/16 "	A and B / I	5790905220	5790905270
Stacking valve	–	tube 1/4 "	B / V	5791805320	5791805370
	–	tube 5/16 "	B / V	5791905220	5791905270
Stacking valve with add. compressed air port	tube 1/4 "	tube 1/4 "	B / II	5796705320	5796705370
	tube 5/16 "	tube 1/4 "	B / II	5796805320	5796805370
	tube 5/16 "	tube 5/16 "	B / II	5796905220	5796905270
End valve	–	tube 1/4 "	B / III	5792805320	5792805370
	–	tube 5/16 "	B / III	5792905220	5792905270
Air conn. module	tube 5/16 "	–	B / IV	5790000092	5790000092

* without el. connector
other voltages on request

Part no. for AC versions (metric)

Description	Port 1	Port 2 and 4	Fig. / Pos. Nr	Part no. * 220/230 V AC	Part no. * 220/230 V AC **
Inlet valve	tube 8 x 1	tube 6 x 1	A and B / I	5790805280	5790805680
	tube 8 x 1	tube 8 x 1	A and B / I	5790905280	5790905680
Stacking valve	–	tube 6 x 1	B / V	5791805280	5791805680
	–	tube 8 x 1	B / V	5791905280	5791905680
Stacking valve with add. compressed air port	tube 6 x 1	tube 6 x 1	B / II	5796705280	5796705680
	tube 8 x 1	tube 6 x 1	B / II	5796805280	5796805680
End valve	–	tube 6 x 1	B / III	5792805280	5792805680
	–	tube 8 x 1	B / III	5792905280	5792905680
Air conn. module	tube 8 x 1	–	B / IV	5790000092	5790000092

* without el. connector ** 220/230 V AC model with LED
other voltages on request

Part no. for AC versions (inch)

Description	Port 1	Port 2 and 4	Fig. / Item no.	Part no. * 220/230 V AC	Part no. * 220/230 V AC **
Inlet valve	tube 1/4 "	tube 1/4 "	A and B / I	5790705380	5790705780
	tube 5/16 "	tube 1/4 "	A and B / I	5790805380	5790805780
	tube 5/16 "	tube 5/16 "	A and B / I	5790905280	5790905680
Stacking valve	–	tube 1/4 "	B / V	5791805380	5791805780
	–	tube 5/16 "	B / V	5791905280	5791905680
Stacking valve with add. compressed air port	tube 1/4 "	tube 1/4 "	B / II	5796705380	5796705780
	tube 5/16 "	tube 1/4 "	B / II	5796805380	5796805780
	tube 5/16 "	tube 5/16 "	B / II	5796905280	5796905680
End valve	–	tube 1/4 "	B / III	5792805380	5792805780
	–	tube 5/16 "	B / III	5792905280	5792905680
Air conn. module	tube 5/16 "	–	B / IV	5790000092	5790000092




* without el. connector ** AC 220/230 V model with LED
other voltages on request

3/2 and 5/2 Valve Series 579, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

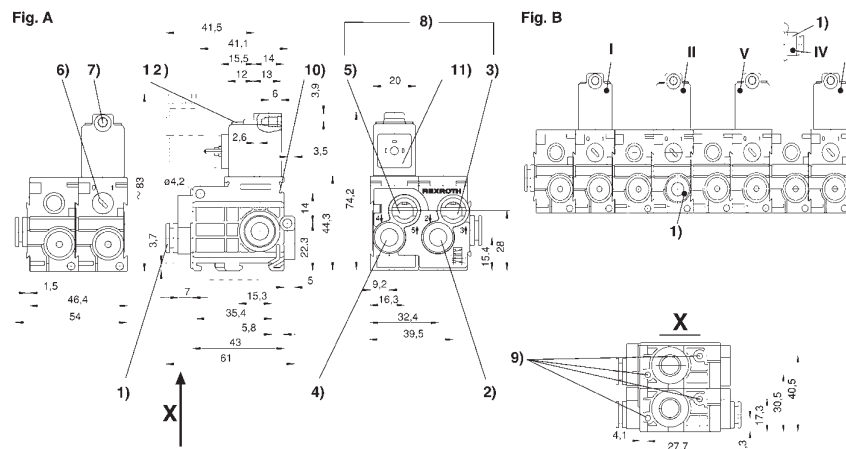
5/2 Valves for valve units, solenoid operated

AVENTICS®

▲ Accessories (to be ordered separately)

Accessory	Description	Part no.				
	Silencer, M 5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer for port 3	5790005312				
	Set screw	8102060582	50-pcs			
	Nameplates 1–10	8943056312	Pkg qty 5-pcs			
	Nameplates 11–20	8943056322	Pkg qty 5-pcs			
	Star washer	8952203504	100 pcs			
	Filter	8993800164	10 pcs			
	See Connectors page					
	Voltage Contact bridge with 0,2 m cable Contact bridge with 1 m cable	24 V DC 5763503113 5763513113				
	Voltages Pilot valve with LED	12 V DC 5420930210	24 V DC 5420930220 5420940620 ¹⁾	24 V AC 5420935220	110 V AC 5420935270	220/230 V AC 5420935280 5420945680

¹⁾ and protected wiring



1) Port 1 2) Port 2 3) Port 3 4) Port 4 5) Port 5 6) Manual override 7) Pilot exhaust core dia. for M 5

8) Exhaust air must not be throttled 9) Pocket hole 6 deep for 3,5 self-tapping screw

10) Mounting space for nameplate 11) Coil can be rotated at 180° intervals 12) LED

* Air conn. module (Item IV) mounted onto stacking valve (Item II) permits additional air supply from right hand side. End valve (Item III) not required.

3/2 Valve, Series 579, ND4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

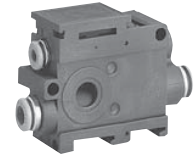
Single valve, air pilot

AVENTICS[®]



Technical Data

Valve type	Poppet valve	
Operating pressure (port 1)	Min. 0,5 bar (7 psi) Max. 8 bar to +60 °C (Max 116 psi to +140 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F) 2 to 10 bar (29 to 145 psi), but ≥ port 1 See table	
Pilot pressure range (port 12)	-15 °C to +60 °C (5 °F to +140 °F) (at p _{max} = 8 bar (116 psi))	
Nominal flow rate Qn at 6 bar (87 psi), Δp = 1 bar (15 psi)	Compressed air, lubricated or non-lubricated 0,042 kg (0.093 lbs)	
Ambient temperature range	PA (Polyamide) NBR and PU (Nitrile Butadien Rubber),	
Medium	Seals	
Weight	(Polyurethane)	
Materials	Valve body	



Application area

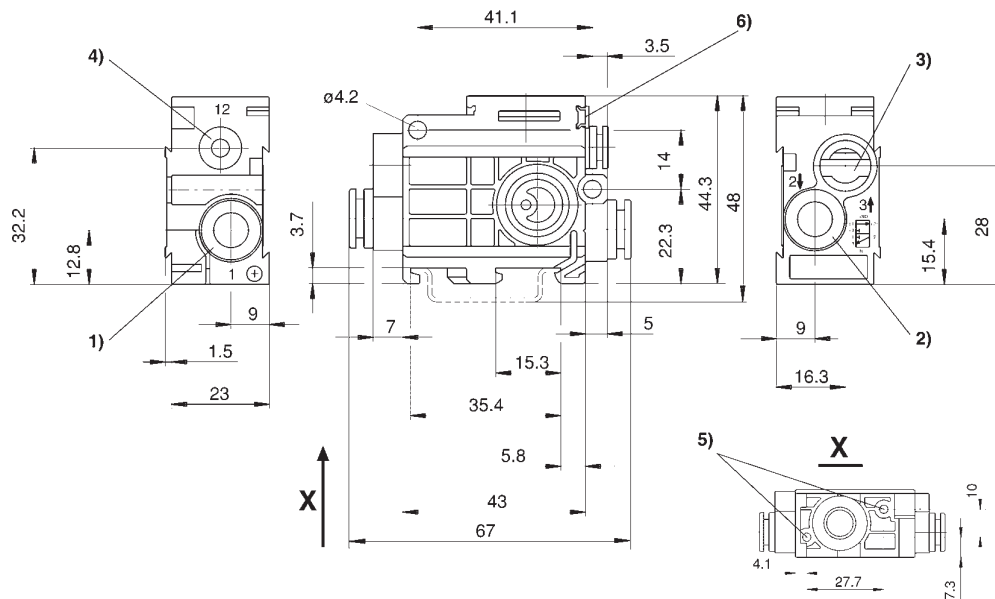
Suitable for all mechanical control systems in stationary applications, especially corrosion proof or lightweight applications.

Part no.

	Port 1	Port 2	Port 12	Qn [l/min] (Cv)	Part no.
	tube 6 x 1 tube 8 x 1 (5/16 ")	tube 6 x 1 tube 8 x 1 (5/16 ")	tube 4 x 1 tube 4 x 1 (5/32 ")	520 (0.52) 850 (0.85)	5794400000 5794600000
	tube 1/4 "	tube 1/4 "	tube 5/32 "	520 (0.52)	5794400020
	tube 6 x 1 tube 8 x 1 (5/16 ")	tube 6 x 1 tube 8 x 1 (5/16 ")	tube 4 x 1 tube 4 x 1 (5/32 ")	520 (0.52) 600 (0.6)	5794400010 5794600010
	tube 1/4 "	tube 1/4 "	tube 5/32 "	520 (0.52)	5794400030

Accessories (to be ordered separately)

Accessory	Description	Part no.	
	Silencer	5790005312	
	Set screw	8102060582	order qty. 50-pcs
	Nameplates 1–10	8943056312	order qty. 5-pcs
	Nameplates 11–20	8943056322	order qty. 5-pcs



- 1) Port 1 2) Port 2 3) Port 3 exhaust air must not be throttled 4) Port 12
5) Pocket hole 6 deep for 3,5 self-tapping screw 6) Mounting space for nameplate

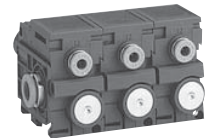
3/2 Valve, Series 579, ND4, 6x1 or 8x1 mm dia.

Valve unit, air pilot



3 Technical Data

Valve type	Poppet valve	
Operating pressure (port 1)	Min. 0,5 bar (7 psi) Max. 8 bar to +60 °C (Max 116 psi to +140 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)	
Pilot pressure range (port 12)	2 to 10 bar (29 to 145 psi), but ≥ port 1	
Nominal flow rate Qn at 6 bar (87 psi), Δp = 1 bar (15 psi)	normally closed	850 l/min (0.85 Cv)
	normally open	600 l/min (0.6 Cv)
Ambient temperature range	-15 °C to +60 °C (5 °F to +140 °F) (at p _{max} = 8 bar (116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Weight	0,042 kg (0.093 lbs)	
Materials	Valve body	PA
	Seals	NBR and PU



Application area

Suitable for all mechanical control systems in stationary applications, especially corrosion proof or lightweight applications.

Part no.

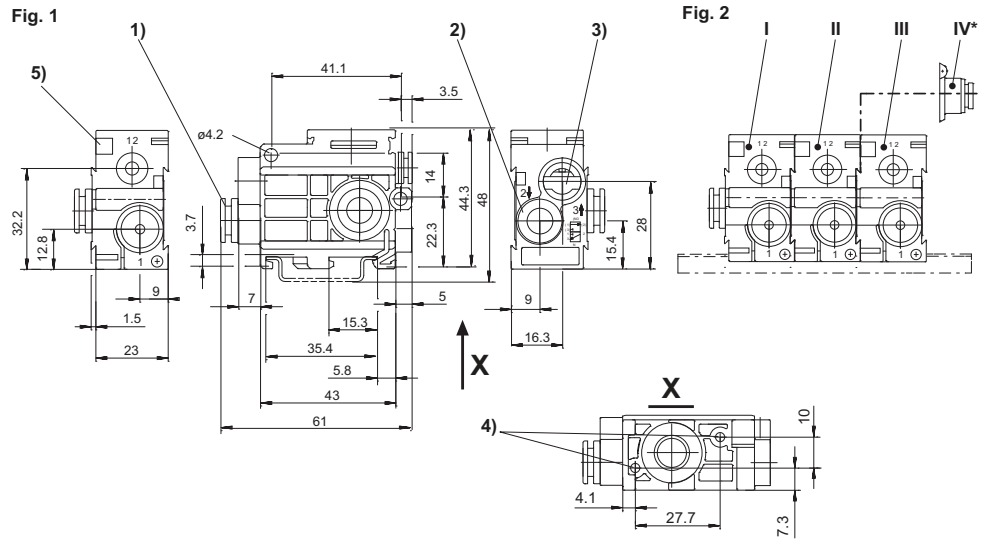
	Description	Port 1	Port 2	Port 12	Fig. /Item no.	Part no.
	Inlet valve Stacking valve	tube 8 x 1 –	tube 8 x 1 tube 8 x 1	tube 4 x 1 tube 4 x 1	A and B / I B / II	5790600000 5791600000
	End valve	–	tube 8 x 1	tube 4 x 1	B / III	5792600000
	Inlet valve Stacking valve	tube 8 x 1 –	tube 8 x 1 tube 8 x 1	tube 4 x 1 tube 4 x 1	A and B / I B / II	5790600010 5791600010
	End valve	–	tube 8 x 1	tube 4 x 1	B / III	5792600010
	Air conn. module	tube 8 x 1	–	–	B / IV	5790000092

Accessories (to be ordered separately)

Accessory	Description	Part no.	
	Silencer	5790005312	
	Set screw	8102060582	order qty. 50-pcs.
	Nameplates 1-10	8943056312	order qty. 5-pcs.
	Nameplates 11-20	8943056322	order qty. 5-pcs.

3/2 Valve, Series 579, ND4, 6x1 or 8x1 mm

Valve unit, air pilot



- 1) Port 1 2) Port 2 3) Port 3 exhaust air must not be throttled 4) Pocket hole 6 deep for 3,5 self-tapping screw 5) Mounting space for nameplate
 * Air conn. module (Item IV) mounted onto stacking valve (Item II) permits additional air supply from right hand side. End valve (Item III) not required.

3/2 and 5/2 Valve, Series 589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

3/2 Single valve, solenoid operated, NC

AVENTICS®



55 Technical Data

Valve type	Poppet valve	
Working pressure range	min. 3 bar (44 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)	
Vacuum	Port 1: Port 3:	min. 3 bar (44 psi) min. -0.95 bar (-14 psi)
Nominal flow rate at 6 bar (87 psi), Δp = 1 bar (15 psi)	Qn	See table
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Weight	0.093 kg (0.205 lbs)	
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances	DC ± 10 % AC - 15 % + 10 % AC - 10 % + 15 %	
Power consumption	50 Hz 60 Hz	1.6 W 1.7 W
24 V DC	without LED-indic. with LED-indic.	1.6 W 1.7 W
Inrush power	220 V AC 50/60 Hz	3.1 / 2.7 VA
Holding power	220 V AC 50/60 Hz	2.2 / 1.9 VA
Insulation class	B to VDE 0580	
Protection with el. connector	IP 65 to IEC 529 (DIN VDE 0470)(NEMA 4)	
Duty cycle	100 %	
Switching times	t _F fill t _E exhaust	18 ms 16 ms



Application area

Suitable for all mechanical control systems in stationary application, especially corrosion proof or lightweight applications.

Part no. (metric)

	Qn (l/min) (Cv)	Port 1	Port 2	Port 3	Voltages	Part no. *
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	12 V DC	5894600210
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	24 V DC	5894600220
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	24 V DC**	5894600620
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	24 V AC	5894605220
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	110 V AC	5894605270
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	220/230 V AC	5894605280
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	220/230 V AC ***	5894605680
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	12 V DC	5894400210
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	24 V DC	5894400220
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	24 V DC**	5894400620
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	24 V AC	5894405220
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	110 V AC	5894405270
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	220/230 V AC	5894405280
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	220/230 V AC***	5894405680

* Without el. connector. ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection).

*** 220/ 230 V AC model with LED
other voltages on request

Valves for valve units (inlet valve, stacking valve and end valve) on request.
Contact your nearest Bosch Rexroth office.

Part no. (inch)

	Qn [l/min] (Cv)	Port 1	Port 2	Port 3	Voltages	Part no. *
	520 (0.52)	tube 1/4 "	tube 1/4 "	tube 5/16 "	12 V DC	5894400310
					24 V DC	5894400320
					24 V DC**	5894400720
					24 V AC	5894405320
					110 V AC	5894405370
					220/230 V AC	5894405380
					220/230 V AC ***	5894405780




* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)

*** 220/ 230 V AC model with LED
other voltages on request

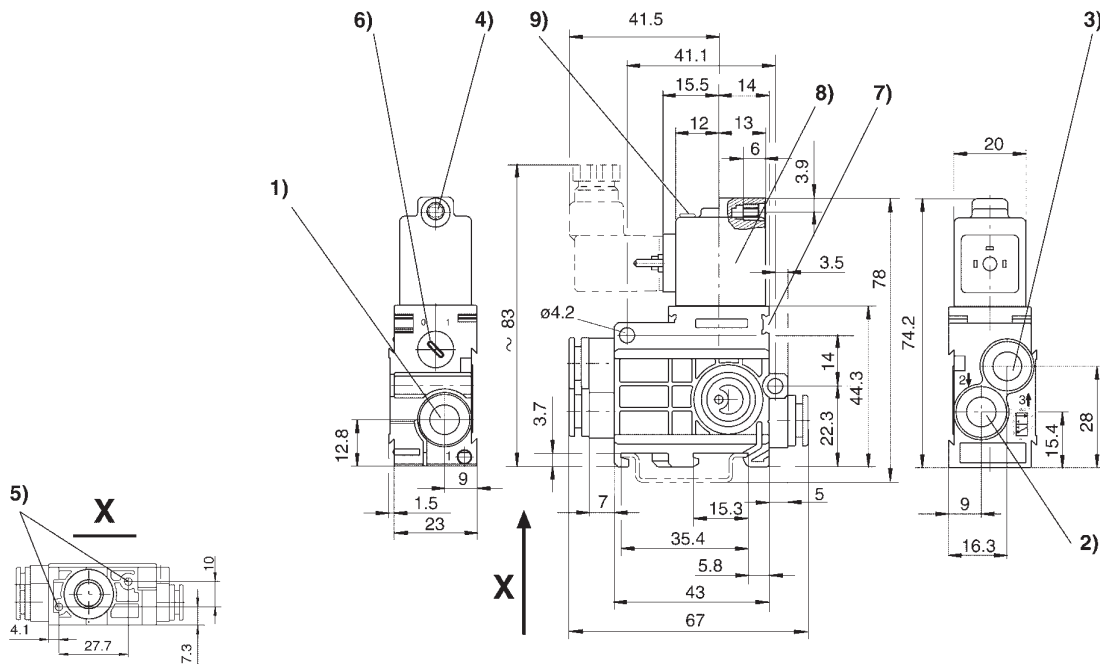
3/2 and 5/2 Valve, Series 589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

3/2 Single valve, solenoid operated, NC



▲ Accessories (to be ordered separately)						
Accessory	Description	Part no.				
	Silencer, M 5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer	8240080000				
	Push-in throttle	3341052010				
	Set screw	8102060582	Pkg qty 50-pcs			
	Nameplates 1–10	8943056312	Pkg qty 5-pcs			
	Nameplates 11–20	8943056322	Pkg qty 5-pcs			
	Star washer	8952203504	100 pcs			
	Filter	8993800164	10 pcs			
	See Connectors page					
	Voltage	24 V DC				
	for BUS- and Multipin-systems					
	Contact bridge with 0,2 m cable	5763503113				
	Contact bridge 1 m cable	5763513113				
	Voltages	12 V DC	24 V DC	24 V AC	110 V AC	220/230 V AC
	Pilot valve	5420930210	5420930220	5420935220	5420935270	5420935280
	with LED		5420940620 ¹⁾			5420945680

1) and protected wiring



- 1) Port 1 2) Port 2 3) Port 3 4) Pilot exhaust core dia. for M 5 5) Pocket hole 6 deep for 3,5 self-tapping screw
6) Manual override 7) Mounting space for nameplate 8) Coil can be rotated at 180° intervals 9) LED

3/2 and 5/2 Valve, Series 589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

3/2 Single valve, solenoid operated, NO

AVENTICS®



Technical Data

Valve type	Poppet valve	
Working pressure range	min. 3 bar (44 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)	
Vacuum	Port 1: Port 3:	min. 3 bar (44 psi) min. -0.95 bar (-14 psi)
Nominal flow rate at 6 bar (87 psi), Δp = 1 bar (15 psi)	Qn	See table
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Weight	0.093 kg (0.205 lbs)	
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances	DC ± 10 % AC - 15 % + 10 % AC - 10 % + 15 %	
Power consumption	50 Hz 60 Hz	1.6 W 1.7 W
24 V DC	without LED display with LED display	1.6 W 1.7 W
Inrush power	220 V AC 50/60 Hz	3.1 / 2.7 VA
Holding power	220 V AC 50/60 Hz	2.2 / 1.9 VA
Insulation class	B to VDE 0580	
Protection with el. connector	IP 65 to IEC 529 (DIN VDE 0470)(NEMA 4)	
Duty cycle	100 %	
Switching times	t _F fill t _E exhaust	18 ms 16 ms



Application area

Suitable for all mechanical control systems in stationary applications, especially corrosion proof or lightweight applications.

Part no. (metric)

	Qn (l/min) (Cv)	Port 1	Port 2	Port 3	Voltages	Part no. *
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	12 V DC	5894610210
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	24 V DC	5894610220
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	24 V DC**	5894610620
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	24 V AC	5894615220
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	110 V AC	5894615270
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	220/230 V AC	5894615280
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	220/230 V AC ***	5894615680
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	12 V DC	5894410210
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	24 V DC	5894410220
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	24 V DC**	5894410620
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	24 V AC	5894415220
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	110 V AC	5894415270
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	220/230 V AC	5894415280
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	220/230 V AC ***	5894415680

* Without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)

*** 220/ 230 V AC model with LED
other voltages on request

Valves for valve units (inlet valve, stacking valve and end valve) on request.
Contact your nearest Bosch Rexroth office.

Part no. (inch)

	Qn [l/min] (Cv)	Port 1	Port 2	Port 3	Voltages	Part no. *
	520 (0.52)	tube 1/4 "	tube 1/4 "	tube 5/16 "	12 V DC	5894410310
					24 V DC	5894410320
					24 V DC**	5894410720
					24 V AC	5894415320
					110 V AC	5894415370
					220/230 V AC	5894415380
					220/230 V AC ***	5894415780




* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)

*** 220/ 230 V AC model with LED
other voltages on request

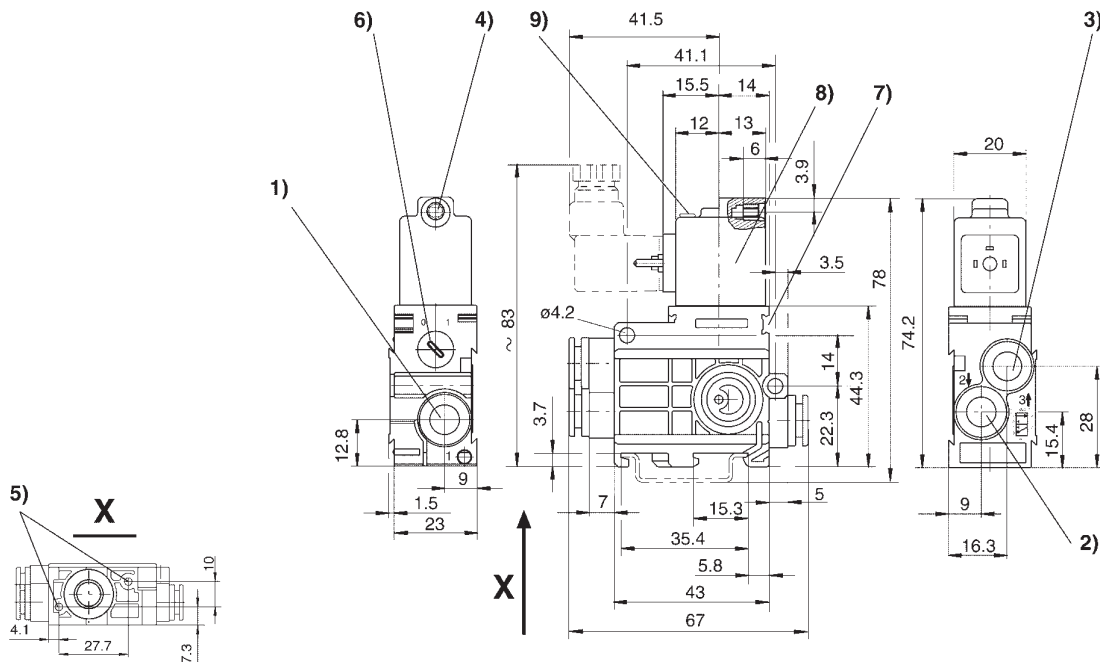
3/2 and 5/2 Valve, Series 589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

3/2 Single valve, solenoid operated, NO



▲ Accessories (to be ordered separately)						
Accessory	Description	Part no.				
	Silencer, M 5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer	8240080000				
	Push-in throttle	3341052010				
	Set screw	8102060582	Pkg qty 50-pcs			
	Nameplates 1–10	8943056312	Pkg qty 5-pcs			
	Nameplates 11–20	8943056322	Pkg qty 5-pcs			
	Star washer	8952203504	100 pcs			
	Filter	8993800164	10 pcs			
	See Connectors page					
	Voltage	24 V DC				
	for BUS- and Multipin-systems					
	Contact bridge with 0,2 m cable	5763503113				
	Contact bridge with 1 m cable	5763513113				
	Voltages	12 V DC	24 V DC	24 V AC	110 V AC	220/230 V AC
	pilot valve	5420930210	5420930220	5420935220	5420935270	5420935280
	with LED		5420940620 ¹⁾			5420945680

1) and protected wiring



- 1) Port 1 2) Port 2 3) Port 3 4) Pilot exhaust core dia. for M 5 5) Pocket hole 6 deep for 3,5 self-tapping screw
6) Manual override 7) Mounting space for nameplate 8) Coil can be rotated at 180° intervals 9) LED

3/2 and 5/2 Valve, Series 589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

3/2 Single valve, solenoid operated, NC, with external pilot



Technical Data

Valve type	Poppet valve	
Working pressure range	Min. 0.5 bar (7 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)	
Vacuum	Port 1: Port 3:	min. 3 bar (44 psi) min. -0.95 bar (-14 psi)
Pilot pressure range (port 12)	3 to 10 bar (44 to 145 psi), but ≥ (port 1)	
Nominal flow rate	Q _n	See table
at 6 bar (87 psi), Δp = 1 bar (15 psi)		
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Weight	0.093 kg (0.205 lbs)	
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances	DC ± 10 % AC - 15 % + 10 % AC - 10 % + 15 %	
Power consumption	50 Hz 60 Hz	1.6 W 1.7 W
24 V DC	without LED display with LED display	3.1 / 2.7 VA 2.2 / 1.9 VA
Inrush power	220 V AC 50/60 Hz	B to VDE 0580
Holding power	220 V AC 50/60 Hz	IP 65 to IEC 529 (DIN VDE 0470)(NEMA 4)
Insulation class	100 %	
Protection with el. connector	18 ms	
Duty cycle	16 ms	
Switching times	t _f fill t _e exhaust	



Application area

Suitable for all mechanical control systems in stationary applications, especially corrosion proof or lightweight applications.

Attention: Application for BUS-communication with contact bridge on request.

Part no. (metric)

	Qn (l/min) (Cv)	Port 1	Port 2	Port 3	Port 12	Voltages	Part no.*
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 4 x 1 (5/32 ")	12 V DC	5894670210
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 4 x 1 (5/32 ")	24 V DC	5894670220
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 4 x 1 (5/32 ")	24 V DC**	5894670620
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 4 x 1 (5/32 ")	24 V AC	5894675220
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 4 x 1 (5/32 ")	110 V AC	5894675270
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 4 x 1 (5/32 ")	220/230 V AC	5894675280
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 4 x 1 (5/32 ")	220/230 V AC ***	5894675680
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	tube 4 x 1	12 V DC	5894470210
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	tube 4 x 1	24 V DC	5894470220
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	tube 4 x 1	24 V DC**	5894470620
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	tube 4 x 1	24 V AC	5894475220
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	tube 4 x 1	110 V AC	5894475270
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	tube 4 x 1	220/230 V AC	5894475280
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	tube 4 x 1	220/230 V AC ***	5894475680

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)

*** 220/ 230 V AC model with LED

other voltages on request

Valves for valve units (inlet valve, stacking valve and end valve) on request.
Contact your nearest Bosch Rexroth office.

3/2 and 5/2 Valve, Series 589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

3/2 Single valve, solenoid operated, NC, with external pilot



Part no. (inch)	Qn [l/min] (Cv)	Port 1	Port 2 and 4	Port 3 and 5	Port 12	Voltages
	520 (0.52)	tube 1/4 "	tube 1/4 "	tube 5/16 "	tube 5/32 "	12 V DC 24 V DC 24 V DC** 24 V AC 110 V AC 220/230 V AC 220/230 V AC ***

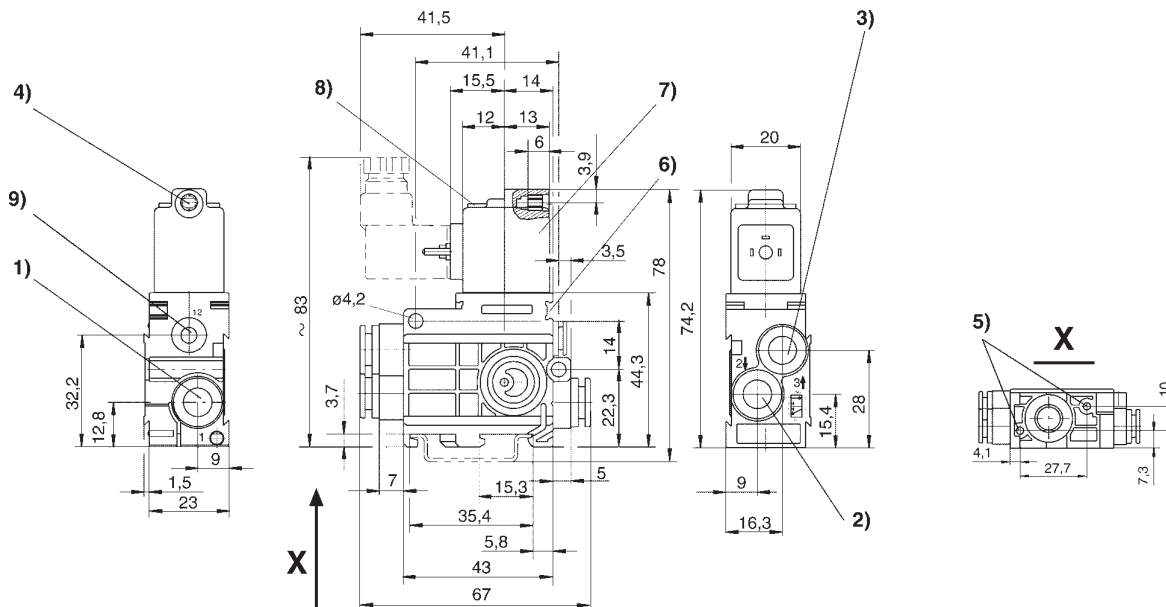
* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)

*** 220/ 230 V AC model with LED other voltages on request

Accessories (to be ordered separately)

Accessory	Description	Part no.				
	Silencer, M 5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer	8240080000				
	Push-in throttle	3341052010				
	Set screw	8102060582	50-pcs			
	Nameplates 1-10	8943056312	Pkg qty 5-pcs			
	Nameplates 11-20	8943056322	Pkg qty 5-pcs			
	Star washer	8952203504	100 pcs			
	Filter	8993800164	10 pcs			
	See Connectors page					
	Voltages	12 V DC	24 V DC	24 V AC	110 V AC	220/230 V AC
	Pilot valve with LED	5420930210	5420930220 5420940620 ¹⁾	5420935220	5420935270	5420935280 5420945680

1) and protected wiring



- 1) Port 1 2) Port 2 3) Port 3 4) Pilot exhaust core dia. for M 5 5) Pocket hole 6 deep for 3,5 self-tapping screw
6) Mounting space for nameplate 7) Coil can be rotated at 180° intervals 8) LED 9) Port 12

3/2 and 5/2 Valve, Series 589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

3/2 Single valve, solenoid operated, NO, with external pilot

AVENTICS®



Technical Data

Valve type	Poppet valve	
Working pressure range	Min. 0.5 bar (7 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)	
Vacuum	Port 1: Port 3:	min. 3 bar (44 psi) min. -0.95 bar (-14 psi)
Pilot pressure range (port 12)	3 to 10 bar (44 to 145 psi), but ≥ (port 1)	
Nominal flow rate	Q _n	
at 6 bar (87 psi), Δp = 1 bar (15 psi)	See table	
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Weight	0.093 kg (0.205 lbs)	
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances	DC ± 10 % AC - 15 % + 10 % AC - 10 % + 15 %	
Power consumption	50 Hz 60 Hz	1.6 W 1.7 W
24 V DC	without LED display with LED display	3.1 / 2.7 VA 2.2 / 1.9 VA
Inrush power	220 V AC 50/60 Hz	B to VDE 0580
Holding power	220 V AC 50/60 Hz	IP 65 to IEC 529 (DIN VDE 0470)(NEMA 4)
Insulation class	IP 65 to IEC 529 (DIN VDE 0470)(NEMA 4)	
Protection with el. connector	100 %	
Duty cycle	18 ms	
Switching times	t _f fill t _e exhaust	16 ms



Application area

Suitable for all mechanical control systems in stationary applications, especially corrosion proof or lightweight applications.

Attention: Application for BUS-communication with contact bridge on request.

Part no. (metric)

	Qn (l/min) (Cv)	Port 1	Port 2	Port 3	Port 12	Voltages	Part no.*
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 4 x 1 (5/32 ")	12 V DC	5894620210
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 4 x 1 (5/32 ")	24 V DC	5894620220
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 4 x 1 (5/32 ")	24 V DC**	5894620620
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 4 x 1 (5/32 ")	24 V AC	5894625220
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 4 x 1 (5/32 ")	110 V AC	5894625270
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 4 x 1 (5/32 ")	220/230 V AC	5894625280
	750 (0.75)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 4 x 1 (5/32 ")	220/230 V AC ***	5894625680
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	tube 4 x 1	12 V DC	5894420210
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	tube 4 x 1	24 V DC	5894420220
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	tube 4 x 1	24 V DC**	5894420620
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	tube 4 x 1	24 V AC	5894425220
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	tube 4 x 1	110 V AC	5894425270
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	tube 4 x 1	220/230 V AC	5894425280
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	tube 4 x 1	220/230 V AC ***	5894425680

* Without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)

*** 220/ 230 V AC model with LED

Valves for valve units (inlet valve, stacking valve and end valve) on request.
Contact your nearest Bosch Rexroth office.

3/2 and 5/2 Valve, Series 589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

3/2 Single valve, solenoid operated, NO, with external pilot



Part no. (inch)	Qn [l/min] (Cv)	Port 1	Port 2 and 4	Port 3 and 5	Port 12	Voltages	Part no. *
	520 (0.52)	tube 1/4 "	tube 1/4 "	tube 5/16 "	tube 5/32 "	12 V DC	5894420310
						24 V DC	5894420320
						24 V DC**	5894420720
						24 V AC	5894425320
						110 V AC	5894425370
220/230 V AC	5894425380						
						220/230 V AC ***	5894425780

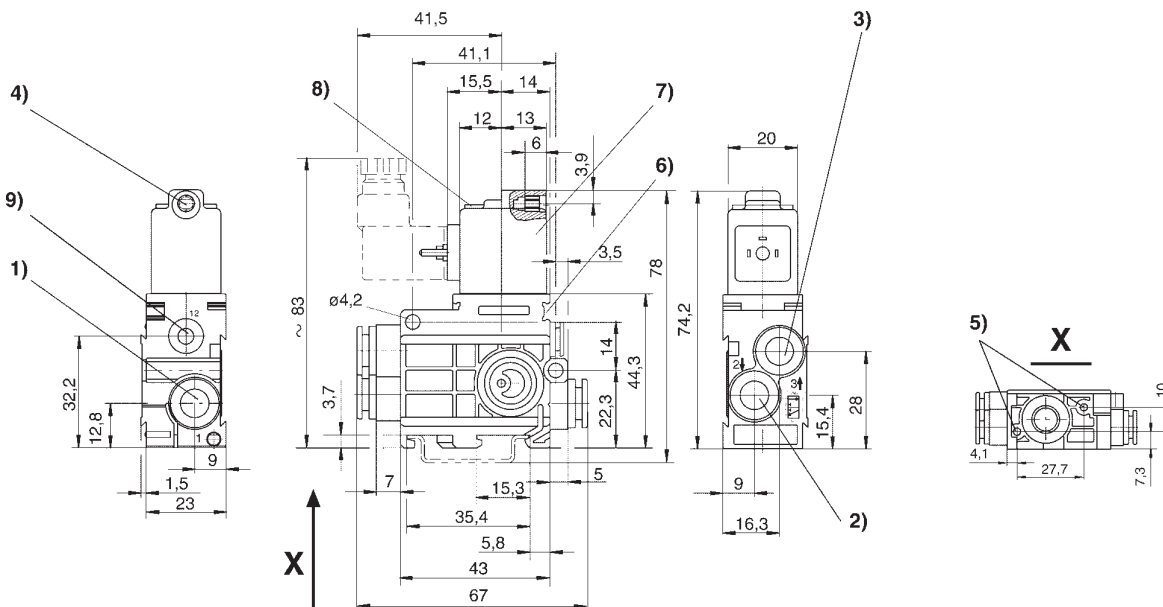
* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)

*** 220/ 230 V AC model with LED
other voltages on request

Accessories (to be ordered separately)

Accessory	Description	Part no.				
	Silencer, M 5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer	8240080000				
	Push-in throttle	3341052010				
	Set screw	8102060582	50-pcs			
	Nameplates 1-10	8943056312	Pkg qty 5-pcs			
	Nameplates 11-20	8943056322	Pkg qty 5-pcs			
	Star washer	8952203504	100 pcs			
	Filter	8993800164	10 pcs			
		See Connectors page				
Voltages		12 V DC	24 V DC	24 V AC	110 V AC	220/230 V AC
	Pilot valve	5420930210	5420930220	5420935220	5420935270	5420935280
	with LED		5420940620 ¹⁾			5420945680

1) and protected wiring



- 1) Port 1. 2) Port 2. 3) Port 3 4) Pilot exhaust core dia. for M. 5) Pocket hole 6 deep for 3,5 self-tapping screw.
6) Mounting space for nameplate 7) Coil can be rotated at 180° intervals 8) LED 9) Port 12

3/2 and 5/2 Valve, Series 589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

5/2 Single valve, solenoid operated



Technical Data

Valve type	Poppet valve	
Working pressure range	min. 3 bar (44 psi) Max. 8 bar to +50 °C (Max. 116 psi to +122 °F) Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)	
Vacuum	Port 1: Port 3:	min. 3 bar (44 psi) min. -0.95 bar (-14 psi)
Nominal flow rate at 6 bar (87 psi), Δp = 1 bar (15 psi)	Qn	See table
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Weight	0.133 kg (0.293 lbs)	
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)
Voltage tolerances	50 Hz 60 Hz	DC ± 10 % AC - 15 % + 10 % AC - 10 % + 15 %
Power consumption 24 V DC	without LED display with LED display	1.6 W 1.7 W
Inrush power	220 V AC 50/60 Hz	3.1 / 2.7 VA
Holding power	220 V AC 50/60 Hz	2.2 / 1.9 VA
Insulation class	B to VDE 0580	
Protection with el. connector	IP 65 to IEC 529 (DIN VDE 0470)(NEMA 4)	
Duty cycle	100 %	
Switching times	t _F fill t _E exhaust	27 ms 28 ms



Application area

Suitable for all mechanical control systems, especially corrosion proof or lightweight applications.

Part no. (metric)

	Qn [l/min] (Cv)	Port 1	Port 2 and 4	Port 3 and 5	Voltages	Part no. *
	600 (0.60)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	12 V DC	5894900210
	600 (0.60)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	24 V DC	5894900220
	600 (0.60)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	24 V DC**	5894900620
	600 (0.60)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	24 V AC	5894905220
	600 (0.60)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	110 V AC	5894905270
	600 (0.60)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	220/230 V AC	5894905280
	600 (0.60)	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	tube 8 x 1 (5/16 ")	220/230 V AC ***	5894905680
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	12 V DC	5894700210
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	24 V DC	5894700220
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	24 V DC**	5894700620
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	24 V AC	5894705220
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	110 V AC	5894705270
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	220/230 V AC	5894705280
	520 (0.52)	tube 6 x 1	tube 6 x 1	tube 8 x 1	220/230 V AC ***	5894705680

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)

*** 220/ 230 V AC model with LED
other voltages on request

Valves for valve units (inlet valve, stacking valve and end valve) on request.
Contact your nearest Bosch Rexroth office.

Part no. (inch)

	Qn [l/min] (Cv)	Port 1	Port 2 and 4	Port 3 and 5	Voltages	Part no. *
	520 (0.52)	tube 1/4 "	tube 1/4 "	tube 5/16 "	12 V DC	5894700310
					24 V DC	5894700320
					24 V DC**	5894700720
					24 V AC	5894705320
					110 V AC	5894705370
					220/230 V AC	5894705380
					220/230 V AC ***	5894705780

* without el. connector ** 24 V model with LED and protection wiring for reducing voltage peaks in solenoid coil (short-circuit protection)




*** 220/ 230 V AC model with LED
other voltages on request

3/2 and 5/2 Valve, Series 589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

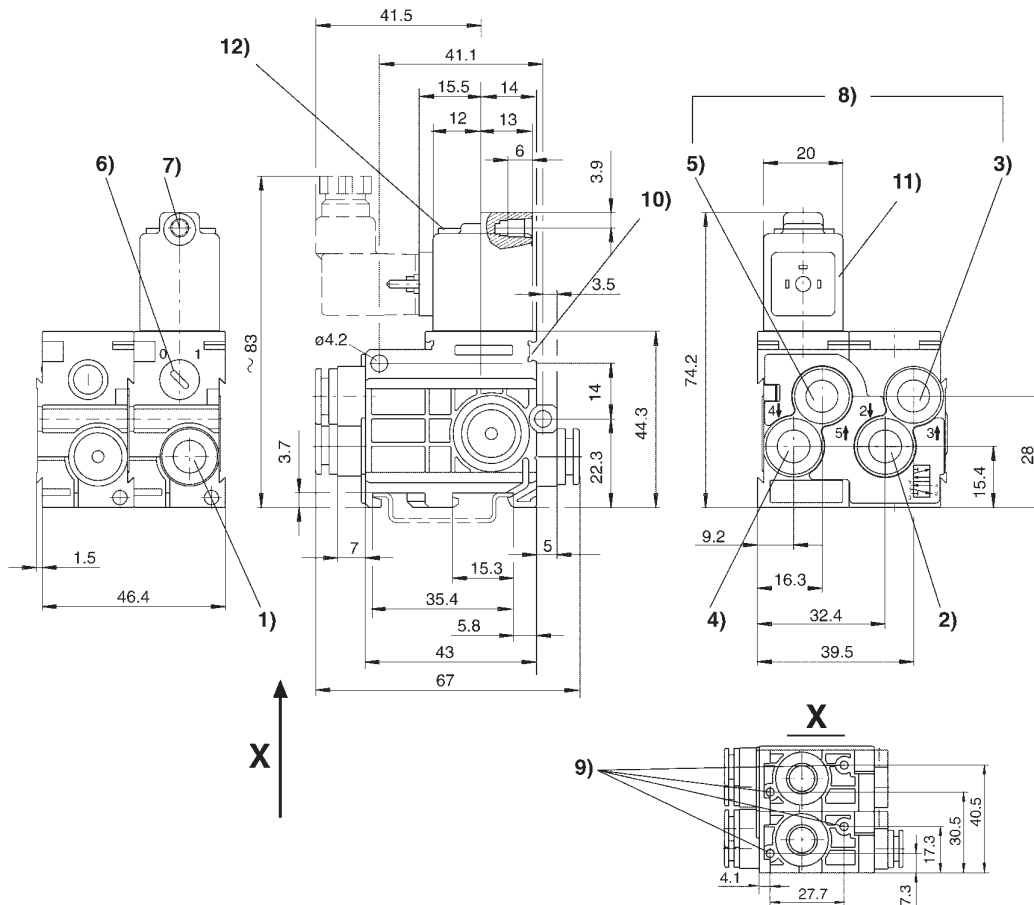
5/2 Single valve, solenoid operated

AVENTICS®

▲ **Accessories (to be ordered separately)**

Accessory	Description	Part no.				
	Silencer, M 5, for pilot exhaust	5324000060				
	Silencer, push-in, for pilot exhaust	8993800114				
	Silencer	8240080000				
	Push-in throttle	3341052010				
	Set screw	8102060582	50-pcs			
	Nameplates 1–10	8943056312	Pkg qty 5-pcs			
	Nameplates 11–20	8943056322	Pkg qty 5-pcs			
	Star washer	8952203504	100 pcs			
	Filter	8993800164	10 pcs			
	See Connectors page					
	Voltage	24 V DC				
	for BUS- and Multipin-systems					
	Contact bridge with 0,2 m cable	5763503113				
	Contact bridge with 1 m cable	5763513113				
	Voltages	12 V DC	24 V DC	24 V AC	110 V AC	220/230 V AC
	Pilot valve	5420930210	5420930220	5420935220	5420935270	5420935280
	with LED		5420940620 ¹⁾			5420945680

1) and protected wiring



3/2 Valve, Series 589, ND4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

Single air pilot

AVENTICS®



Technical Data

Valve type		Poppet valve
Operating pressure (port 1)		Min. 0,5 bar (7 psi)
		Max. 8 bar to +60 °C (Max. 116 psi to +140 °F)
Vacuum	Port 1:	Max. 10 bar to +40 °C (Max. 145 psi to +104 °F)
	Port 3:	Min. 3 bar (44 psi)
Pilot pressure range (port 12)		Min. -0,95 bar (-14 psi)
Nominal flow rate	Qn	3 to 10 bar (44 to 145 psi), but ≥ port 1
Ambient temperature range		-15 °C to +60 °C (+5 °F to +140 °F) (at p _{max} = 8 bar (116 psi))
Medium		Compressed air, lubricated or non-lubricated
Weight		0,042 kg (0.093 lbs)
Materials	Valve body	PA (Polyamide)
	Seals	NBR and PU (Nitrile Butadien Rubber and Polyurethane)



Application area

Suitable for all mechanical control systems in stationary applications, especially corrosion proof or lightweight applications, as well as for throttling on port 3.

Part no.

	Port 1	Port 2	Port 3	Port 12	Qn l/min (Cv)	Part no.
	tube 6 x 1 tube 8 x 1 (5/16 ")	tube 6 x 1 tube 8 x 1 (5/16 ")	tube 8 x 1 tube 8 x 1 (5/16 ")	tube 4 x 1 tube 4 x 1 (5/32")	520 (0.52) 750 (0.75)	5894400000 5894600000
	tube 1/4 "	tube 1/4 "	tube 1/4 "	tube 5/32"	520 (0.52)	5894400020
	tube 6 x 1 tube 8 x 1 (5/16 ")	tube 6 x 1 tube 8 x 1 (5/16 ")	tube 8 x 1 tube 8 x 1 (5/16 ")	tube 4 x 1 tube 4 x 1 (5/32")	520 (0.52) 750 (0.75)	5894400010 5894600010
	tube 1/4 "	tube 1/4 "	tube 5/16 "	tube 5/32 "	520 (0.52)	5894400030

Valves for valve units (inlet valve, stacking valve and end valve) on request.
Contact your nearest Bosch Rexroth office.

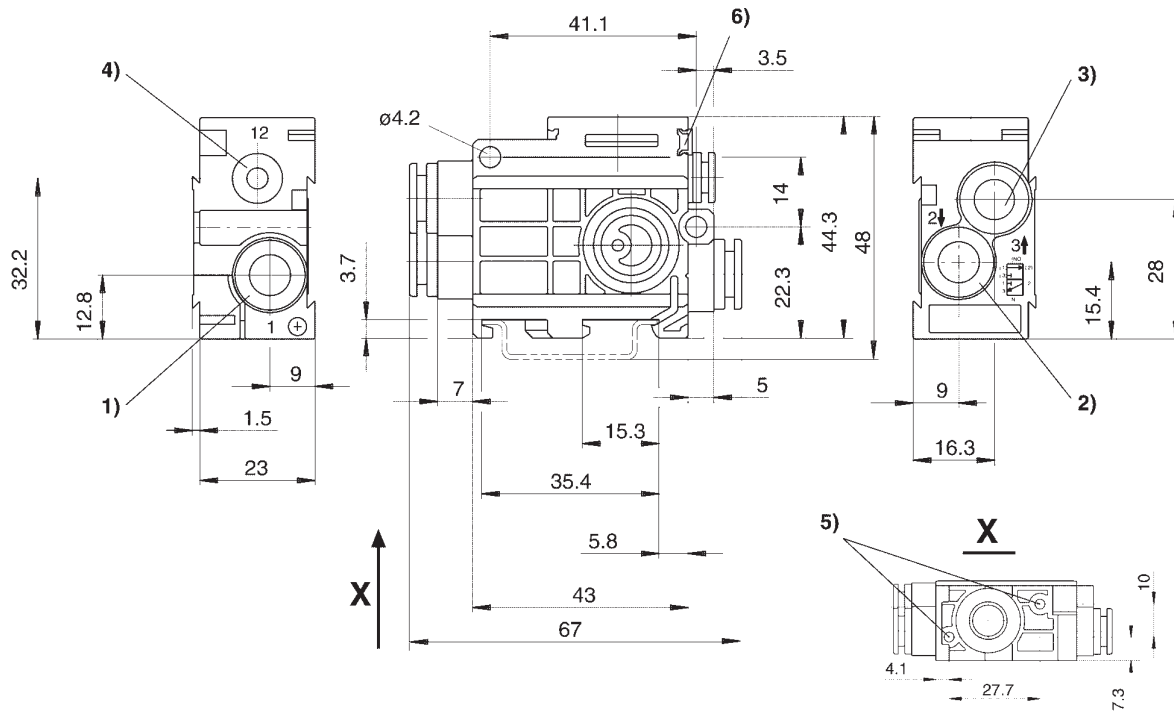
Accessories (to be ordered separately)

Accessory	Description	Part no.	
	Silencer	8240080000	
	Set screw	8102060582	pkg qty. 50-pcs
	Nameplates 1-10	8943056312	pkg qty. 50-pcs
	Nameplates 11-20	8943056322	pkg qty. 50-pcs

3/2 Valve, Series 589, ND4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

Single air pilot

AVENTICS®



- 1) Port 1 2) Port 2 3) Port 3 4) Port 12
5) Pocket hole 6 deep for 3,5 self-tapping screw 6) Mounting space for nameplate

3/2 and 5/2 Valve Series 579/589

6x1 or 8x1 mm, 1/4" or 5/16" dia.

Valve units, electrical version 10-18, without connectors

AVENTICS®



Technical Data

Valve type	Poppet valve	
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Materials	Valve body Seals	PA (Polyamide) NBR and PU (Nitrile Butadiene Rubber, Polyurethane)

Application area


Suitable for all mechanical control systems, especially corrosion proof or lightweight applications.



For ordering see our internet configurator on www.boschrexroth-us.com

- without connectors
- with unlimited number of valves
- available voltages: 12 V DC (version 10), 24 V DC (version 11), 24 V DC with LED and short-circuit protection (version 12)
24 V AC (version 15), 110 V AC (version 16), 220/230 V AC (version 17), 220/230 V AC with LED (version 18)

Accessories (to be ordered separately)

	Type	Part no.
	connector to DIN 43650, Form C for all voltages	8941012202

¹⁾ and protected wiring

3/2 and 5/2 Valve Series 579/589, and 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

Valve units, electrical version 20/21, with connectors

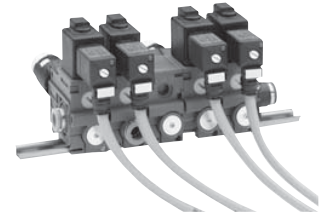


Technical Data

Valve type	Poppet valve	
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Materials	Valve body	PA (Polyamide)
	Seals	NBR and PU (Nitrile Butadiene Rubber, Polyurethane)

Application area


Suitable for all mechanical control systems, especially corrosion proof or lightweight applications.



For ordering see our internet configurator on www.boschrexroth-us.com

- with connectors with LED and 3 m (9.8 ft.) cable already mounted
- with unlimited number of valves
- available voltages: 24 V DC (version 20), 24 V AC (version 21)

Accessories (to be ordered separately)

	Type	Part no.
	connector to DIN 43650, Form C with LED and 3 m cable for 24 V AC/DC	8941000512

3/2 and 5/2 Valve Series 579/589 6x1 or 8x1 mm, 1/4" or 5/16" dia.

Valve units, electrical version 60, for multiple wiring

AVENTICS®

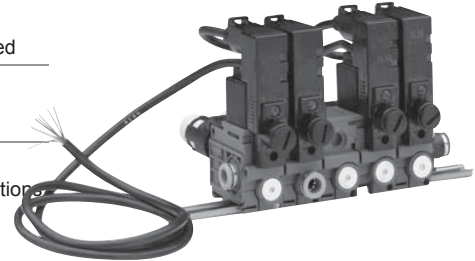


Technical Data

Valve type	Poppet valve	
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Materials	Valve body	PA (Polyamide)
	Seals	NBR and PU (Nitrile Butadiene Rubber, Polyurethane)

Application area

Suitable for all mechanical control systems, especially corrosion proof or lightweight applications



For ordering see our internet configurator on www.boschrexroth-us.com

- multi-pin version with contact bridges for 24 V DC valves
- max. number of valves = 8
- without sensor inputs
- first valve position delivered with 5 m (16.4 ft.) cable and open cable end for connection to terminal
- valves have a 180° turned coil

Accessories (to be ordered separately)

Type	Part no.
Contact bridges for multi-pin control, LED, 0,2 m (0.66 ft.) cable	5763533103
Contact bridges for multi-pin control, LED, 5 m (16.4 ft.) cable	5763533113

3/2 and 5/2 Valve Series 579/589

6x1 or 8x1 mm, 1/4" or 5/16" dia.

Valve units, electrical version 70-71, for BUS communication

AVENTICS®



Technical Data

Valve type	Poppet valve	
Ambient temperature range	-15 °C to +50 °C (at p _{max} = 8 bar) (+5 °F to +122 °F (at p _{max} = 116 psi))	
Medium	Compressed air, lubricated or non-lubricated	
Materials	Valve body	PA (Polyamide)
	Seals	NBR and PU (Nitrile Butadiene Rubber, Polyurethane)

Application area

Suitable for all mechanical control systems, especially corrosion proof or lightweight applications.



For ordering see our internet configurator on www.boschrexroth-us.com

- BUS-version with contact bridges for 24 V DC valves
- max. number of valves = 16
- first valve position delivered with 5 m (16.4 ft.) cable and with a connector to BUS-module
- valves have a 180° turned coil
- version 70 without sensor inputs, version 71 with sensor inputs

Accessories (to be ordered separately)

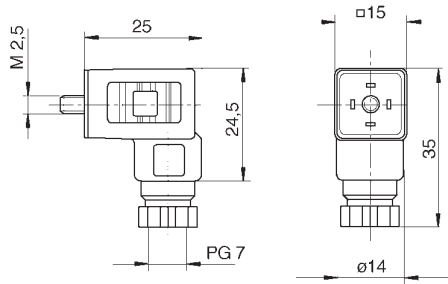
	Type	Part no.
	Contact bridge with 2 sensor inputs, LED, 0,2 m (0.66 ft.) cable	5763503113
	Contact bridge with 2 sensor inputs, LED, 1 m (3.28 ft.) cable	5763513113
	Contact bridge with 2 sensor inputs, LED, 5 m (16.4 ft.) cable	5763523113
	Contact bridge without sensor inputs, LED, 0,2 m (0.66 ft.) cable	5763513133
	Pilot valve 24 V DC	5420930220

3/2 and 5/2 Valve, Series 579/589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

Connectors



▲ ★ Electrical connector, Form C, non-lighted (for all 579/589 valve voltages)

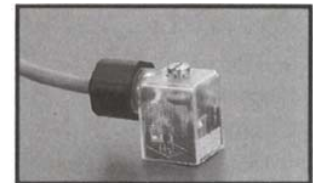


Nominal voltage	Switching current	Wire cross-section max.	Cable gland	Weight (kg) (lbs)	Ambient temp. range	Part no.
250 V AC / 300 V DC	max. 6 A	0,75 mm ² (19 AWG)	M12 x 1 (for Ø 6,5 mm)	0.012 (0.026 lbs)	-40 °C to +90 °C (-40 °F to +194 °F)	8941012202

- Protection (mounted) IP 65 to DIN VDE 0470 (NEMA 4)
- Air and leakage paths to VDE 0110 insulation class C
- The connector cable outlet can be turned through 4 x 90° on its base
- Connection block
- Number of pins 2 + protection contact
- Tightening torque : 50 Ncm (4.43 in.lbs)
- Body black
- * Part no. incl. seal and screw

▲ ★ Electrical connector, Form C, lighted

Description	Part No.
120VAC with 3' lead	R432011961
120VAC with 6' lead	R432011963
120VAC without lead	R432011981
24VAC/DC with 3 ft. lead	R432011962
24VAC/DC with 6 ft. lead	R432011064
24VAC/DC without lead	R432011982



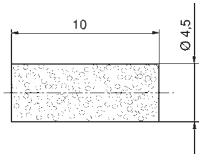
Nominal Current: 10A
 Operating Current: 6A
 Color: Clear
 Protection Class: NEMA 4
 Insulation Class: VDE 01 10
 Gasket Material: Nitrile
 Temp. Range for Gaskets: -40° to +90°C (-40° to +194°F)

3/2 and 5/2 Valve, Series 579/589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

Accessories

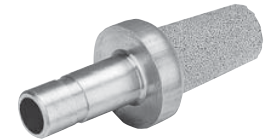
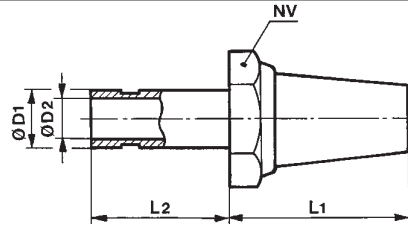
AVENTICS®

▲ ★ Silencer, 4,5 mm dia., for pilot exhaust (push-in), for Series 579/589



Ambient temperature range	p max. [bar] (psi)	Material	Part no.
-25 °C to +80 °C (-13 °F to +176 °F)	10 (145)	Sintered bronze	8993800114

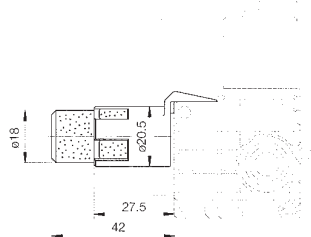
▲ ★ Silencer, sintered bronze, with male stem, for Series 589



Ø D1 [mm]	Ø D2 [mm]	L1	L2	NV	Flow rate max. [l/min] (Cv)	Part no.
8	6	25	19	17	2100 (2.10)	8240080000

Materials; Sintered bronze, stem in brass.
Working pressure p max.: 10 bar (145 psi).
Ambient temperature range: -20 °C to +70 °C (-4 °F to +158 °F)

▲ ★ Silencer for Series 579



Nominal flow max. [l/min] (Cv)	Sound pressure level*	p ^{max} [bar] (psi)	Weight [kg] (lbs)	Ambient temp. range	Pkg quantity	Part no.
1300 (1.30)	78 dB(A)	10 (145)	0.008 (0.018)	-25 °C to +60 °C (-13 °F to +140 °F)	1	5790005312
1300 (1.30)	78 dB(A)	10 (145)	0.080 (0.176)	-25 °C to +60 °C (-13 °F to +140 °F)	10	5790005332
1300 (1.30)	78 dB(A)	10 (145)	0.800 (1.764)	-25 °C to +60 °C (-13 °F to +140 °F)	100	5790005352

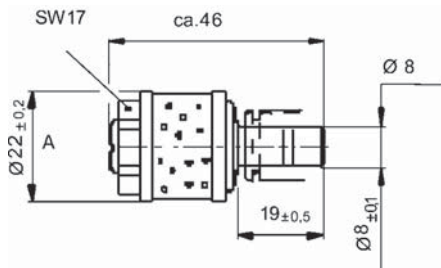
* to DIN 45 635 Material: PA-MxD6, PE porous

3/2 and 5/2 Valve, Series 579/589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

Accessories

AVENTICS®

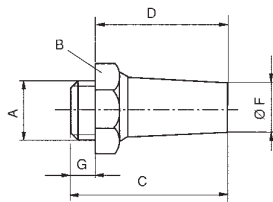
▲ ★ **Push-in throttle with silencer for Series 589**



Nominal flow max. [l/min] (Cv)	Sound pressure level*	p ^{max} [bar] (psi)	Weight [kg] (oz.)	Ambient temp. range	Pkg quantity	Part no.
1300 (1.30)	ca. 75 dB(A)	10 (145)	0.06 (2.1)	-25 °C to +60 °C (-13 °F to +140 °F)	1	3341052010

Materials
 Silencer: sintered plastic
 Insert throttle: brass zinc-plated
 Sealings: NBR

▲ ★ **Silencer, M5, for coil exhaust for Series 579/589**



A	B	C	D	F	G	Part no.
M 5	SW 7	17	13	4	4	5324000060

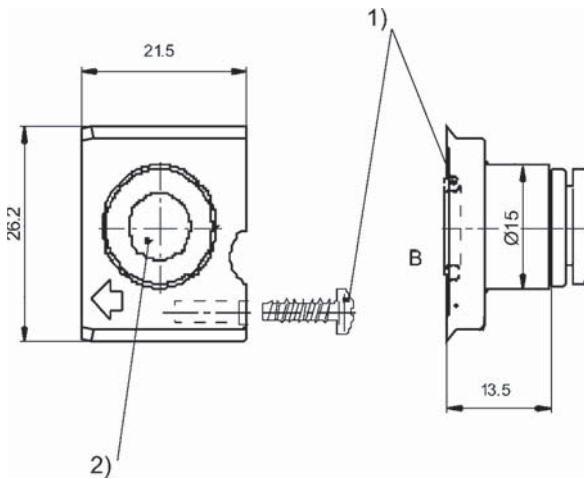
Sound pressure level to DIN 45 635: 65 dB(A) Material: Sintered bronze Operating pressure p max.: 10 bar (145 psi)
 Ambient temperature range: -25°C to + 80°C (-13° F to 176° F)

3/2 and 5/2 Valve Series 579/589, ND 4, 6x1 mm , 8x1 mm, 1/4" or 5/16" dia.

Accessories



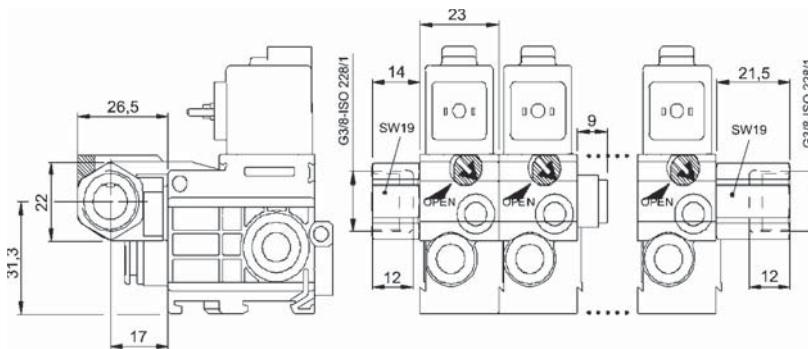
▲ Air connection module with push-in fitting for Series 579



- 1) with O-ring and tapping screw
- 2) Push-in fitting for tube 8x1

Port	Part no.
8x1(5/16")	579000092

➔ Exhaust module for Series 579



with O-rings

Temperature Range	Working pressure range	Description	Part no.
-15 to +60 °C (+5 °F to +140 °F)	-0,95 to 10 (-14 to 145 psi)	Exhaust module left G 3/8	5790002202
-15 to +60 °C (+5 °F to +140 °F)	-0,95 to 10 (-14 to 145 psi)	Exhaust module linking	5790002212
-15 to +60 °C (+5 °F to +140 °F)	-0,95 to 10 (-14 to 145 psi)	Exhaust module right, closed	5790002222
-15 to +60 °C (+5 °F to +140 °F)	-0,95 to 10 (-14 to 145 psi)	Exhaust module left 10 x 1	5790002232
-15 to +60 °C (+5 °F to +140 °F)	-0,95 to 10 (-14 to 145 psi)	Exhaust module right, G 3/8	5790002242

For porous polyethene silencer with G3/8 thread for use in exhaust module left, order 1827000021

3/2 and 5/2 Valve Series 579/589, ND 4, 6x1 or 8x1 mm, 1/4" or 5/16" dia.

Accessories



▲ ★ Nameplates



No.	Pkg quantity	Part no.
1-10	5-pcs	8943056312
11-20	5-pcs	8943056322

▲ ★ Set screw



Pkg quantity	Part no.
50-pcs	8102060582

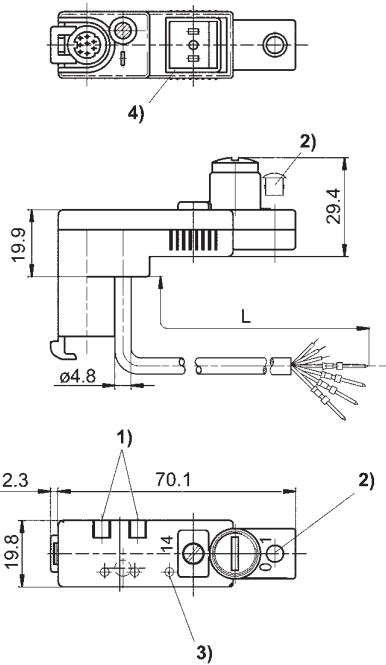
Material: stainless steel

3/2 and 5/2 Valve, Series 579/589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

Contact bridge for multi-pin control, for the 1st. valve position



▲ ★ Contact bridge (single) for multi-pin control, 1st. Valve



1) Mounting space for nameplates. 2) Protecting cap for manual override. 3) LED valve switching status. 4) Seal fixed.

Cable length L [m]	Current consumption max. [mA]	Operating voltage	Weight [kg] (lbs)	Part no.
5	100	24 V DC	0.800 (1.764)	5763533113

Material: PEI Black Polyurethane hose Protection class : IP 65-IEC 529 (DIN VDE 0470) (NEMA 4)
 Ambient temperature range: -15°C to +50°C (5° F to + 122° F) Protected wiring : Zener diode
 Assembly torque for mounting screw: 0,25 +0.05 Nm (2.21 +0.44in.lbs)
 Up to max. 8 valve spools can be connected with a minimum of installation time and expense using this contact bridge

☐ ★ Cable grouping

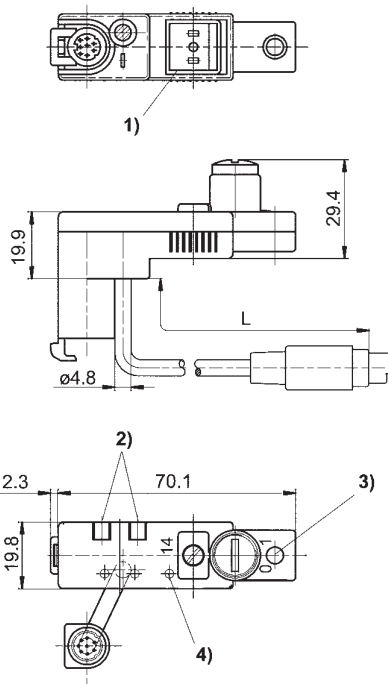
Wire color Valve position	black 24 V - 1	Brown 24 V - 2	orange 24 V - 3	Yellow 24 V - 4	Green 24 V - 5
Wire color Valve position	purple 24 V - 6	white 24 V - 7	pink 24 V - 8	blue 0 V 1-8	

3/2 and 5/2 Valve, Series 579/589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

Contact bridge for multi-pin control, for the 2nd. to the 8th. valve position



▲ ★ Contact bridge (single) for multi-pin control, 2nd. - 8th. valve



1) Seal fixed 2) Mounting space for nameplates 3) Protecting cap for manual override 4) LED valve switching status

Cable length L [m]	Current consumption max. [mA]	Operating voltage	Weight [kg] (lbs)	Part no.
0,2	100	24 V DC	0.039 (0.086)	5763533103

Material : PEI Mini DIN 8-pin connector Black Polyurethane hose Protection class : IP 65-IEC 529 (DIN VDE 0470) (NEMA 4)
Ambient temperature range : -15 °C to +50 °C (5 °F to + 122 °F) Protecting wiring: Zener diode.
Assembly torque for mounting screw: 0,25 + 0,05 Nm (2.21 + 0,44 in.lbs)

▲ ★ Accessories (to be ordered separately)

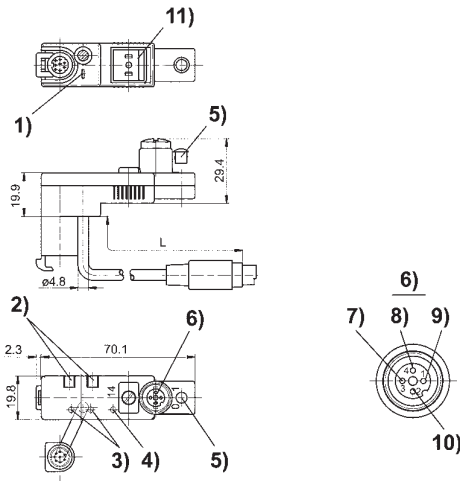
Accessory	Type	Part no.
	End plug for last contact bridge	5763500414
	Protecting cap for manual override 10 pieces / bag	8980122904

3/2 and 5/2 Valve, Series 579/589, ND 4, 6x1 mm or 8x1 mm, 1/4" or 5/16" dia.

Contact bridge for single solenoid with pin centers 8 mm



▲ ★ Contact bridge for single solenoid with pin center 8 mm



- 1) Additional function-earth connection 2) Mounting for nameplates 3) LED green operating status sensor 4) LED yellow operating status valve 5) Sealing cap for manual override 6) Sensor input 7) 0 V 8) Sensor 1 9) 24 V DC 10) Sensor 2

Cable length L [m]	Operating current max. [mA]	Operating voltage	Weight [kg] (lbs)	Part no. with 2 sensors inputs	Part no. without sensor inputs
0,2	100	24 V DC	0.039 (0.086)	5763503113*	5763513133
0,5	100	24 V DC	0.070 (0.154)	5763553113*	-
1	100	24 V DC	0.150 (0.331)	5763513113*	-
5	100	24 V DC	0.800 (1.764)	5763523113*	-
0,5 M12**	100	24 V DC	0.070 (0.154)	5763523133*	-

Material: Polyetherimit (Uitem) Mini DIN 8-pin connector Black PVC cable
 Protection class : IP 65-IEC 529 (DIN VDE 0470) (NEMA 4), IP65 protection only with covered connectors
 Ambient temperature range: -15°C to +50°C (5° F to 122° F) Protective circuit : Zener diode
 Assembly torque for mounting screw: 0,25 ^{+0.05} Nm (2.21 ^{+0.44} in.lbs)
 Cable cross-section AWG 26 The first and the last bridge of each valve unit must be connected to function-earth with a cable
 * protection cap for sensor input to be ordered separately
 ** to be connected to the connection cable of the Flat Design, for the first valve position.

▲ ★ Accessories (to be ordered separately)

Accessory	Part no.
Protection cap for Sensor input	8941350294
End plug for last contact bridge	5763500404
Sealing cap for manual override	8980122904

Our expertise is your competitive advantage

Experience and expertise combined with world-class products. Working with Rexroth means working with a partner who can show you how to apply pneumatics for your competitive advantage.

Producing movement with air—that's pneumatics from Rexroth. We can show you how to do more with air—to achieve higher productivity, greater precision, and higher reliability. And with a complete portfolio of pneumatic, hydraulic, mechanical, electronic, and electro-pneumatic components and systems, Rexroth is your global source of industrial automation solutions.



Standard or custom

Providing a sophisticated and extensive standard product line in both NPT and ISO G (BSPP) port configurations, our products include pneumatic valves and actuators, pneumatic and hydraulic cylinders, pneumatic fieldbus valve manifolds, electro-pneumatic valves and positioners, FRLs, tubing and fittings, vacuum components, industrial shock absorbers, and tooth chain products.

We can also customize products to produce application-specific solutions. Our experience in materials, design and manufacturing, and machine knowledge gives us the flexibility to work with you to craft the exact solution you need.

Versatile, modular, precise

Our products are designed with market-specific needs in mind. You'll find what you need rather than trying to force-fit a close cousin. Or we'll give you the custom solution you need. Our modular approach means greater versatility and flexibility in application and customization. What's more, the modularity allows easier integration and greater cost savings.

Customer-based product development

Our products have always been state-of-the-art technology. We are constantly developing new products and improving existing ones—while working with customers globally to understand evolving needs. By focusing our product development on your real-world needs, we create products that give you a competitive edge in reliability, capabilities, and easy use.

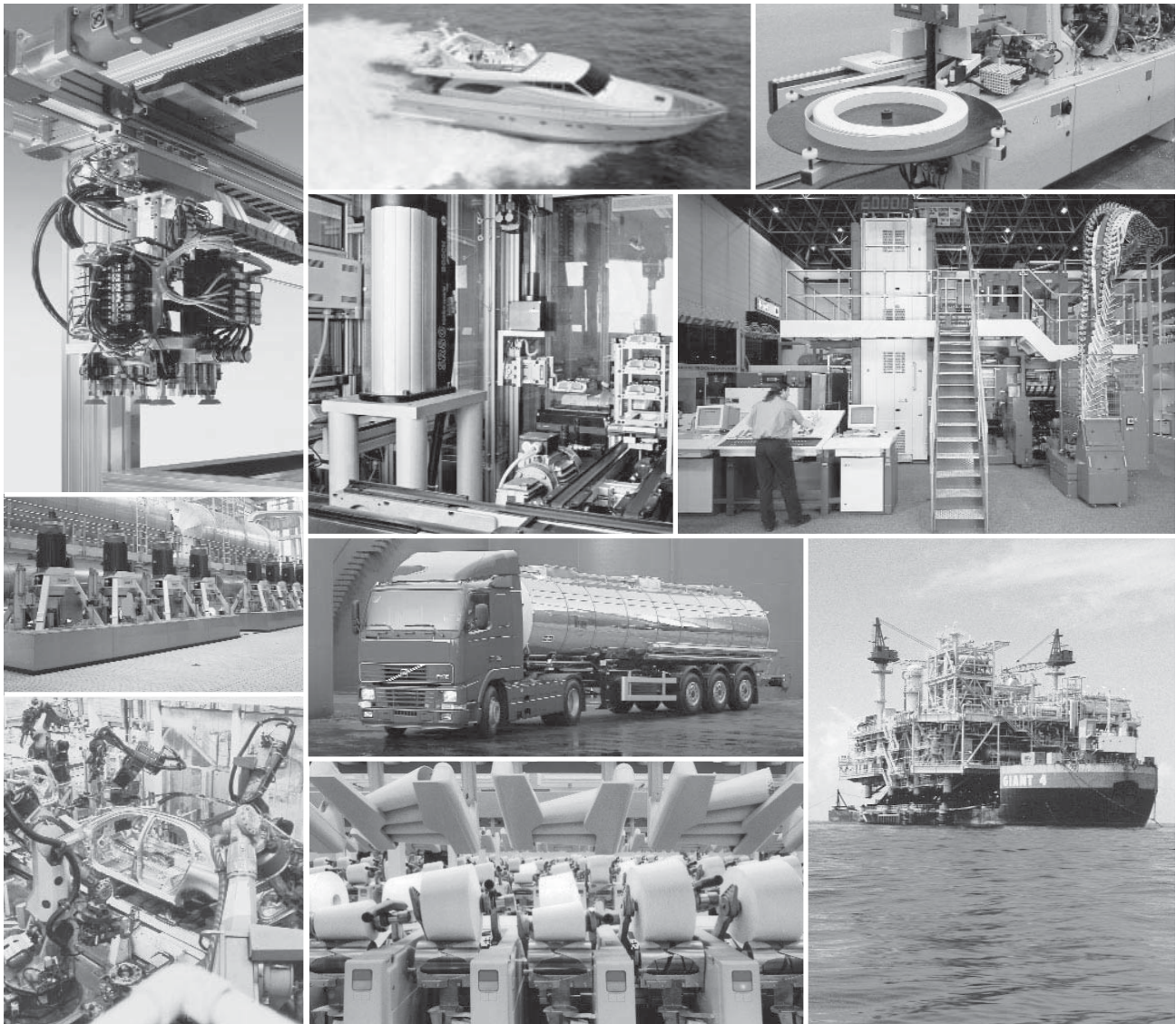
Worldwide presence

Global presence, global availability, global application—with Rexroth you have an international supplier who can support you worldwide. Five development centers—in Lexington, Kentucky; Hannover and Schwieberdingen, Germany; Stockholm, Sweden; and Bonneville, France—serve as centers of competence for advancing the state of the art in pneumatics in an ISO 9001-certified design and production environment.

Industry-specific solutions

One size pneumatic solutions don't fit all application needs. Different industries have decidedly different needs. The requirements of the food processing industry, for example, differ enormously from those

of the automotive industry or the challenges of system automation. Our application specialists have experience in your market, understand your specific needs, and can work with you to find the proper products.



NOTICE TO PRODUCT USERS

1. WARNING: FLUID MEDIA

AVENTICS pneumatic devices are designed and tested for use with filtered, clean, dry, chemical free air at pressures and temperatures within the specified limits of the device. For use with media other than air or for human life support systems, AVENTICS must be consulted. Hydraulic cylinders are designed for operation with filtered, clean, petroleum based hydraulic fluid; operation using fire-resistant or other special types of fluids may require special packing and seals. Consult the factory.

2. WARNING: MATERIAL COMPATIBILITY

Damage to product seals or other parts caused by the use of non-compatible lubricants, oil additives or synthetic lubricants in the air system compressor or line lubrication devices voids the AVENTICS warranty and can result in product failure or other malfunction. See lubrication recommendations below.

AIR LINE LUBRICANTS! In service higher than 18 cycles per minute or with continuous flow of air through the device, an air line lubricator is recommended.* (Do not use line lubrication with vacuum products.) However, the lubricator must be maintained since the oil will wash out the grease, and lack of lubrication will greatly shorten the life expectancy. The oils used in the lubricator must be compatible with the elastomers in the device. The elastomers are normally BUNA-N, NEOPRENE, VITON, SILICONE and HYTREL. AVENTICS recommends the use of only petroleum based oils without synthetic additives, and with an aniline point between 180° F and 210° F.

COMPRESSOR LUBRICANTS! All compressors (with the exception of special "oil free" units) pass oil mist or vapor from the internal crankcase lubricating system through to the compressed air. Since even small amounts of non-compatible lubricants can cause severe seal deterioration (which could result in component and system failure) special care should be taken in selecting compatible compressor lubricants.

3. WARNING: INSTALLATION AND MOUNTING

The user of these devices must conform to all applicable electrical, mechanical, piping and other codes in the installation, operation or repair of these devices.

INSTALLATION! Do not attempt to install, operate or repair these devices without proper training in the technique of working on pneumatic or hydraulic systems and devices, unless under trained supervision. Compressed air and hydraulic systems contain high levels of stored energy. Do not attempt to connect, disconnect or repair these products

when a system is under pressure. Always exhaust or drain the pressure from a system before performing any service work. Failure to do so can result in serious personal injury.

MOUNTING! Devices should be mounted and positioned in such a manner that they cannot be accidentally operated.

4. WARNING: APPLICATION AND USE OF PRODUCTS

The possibility does exist for any device or accessory to fail to operate properly through misuse, wear or malfunction. The user must consider these possibilities and should provide appropriate safe guards in the application or system design to prevent personal injury or property damage in the event of a malfunction.

5. WARNING: CONVERSION, MAINTENANCE AND REPAIR

When a device is disassembled for conversion to a different configuration, maintenance or repair, the device must be tested for leakage and proper operation after being reassembled and prior to installation.

MAINTENANCE AND REPAIR! Maintenance periods should be scheduled in accordance with frequency of use and working conditions. All AVENTICS products should provide a minimum of 1,000,000 cycles of maintenance free service when used and lubricated as recommended. However, these products should be visually inspected for defects and given an "in system" operating performance and leakage test once a year. Where devices require a major repair as a result of the one million cycles, one year, or routine inspection, the device must be disassembled, cleaned, inspected, parts replaced as required, rebuilt and tested for leakage and proper operation prior to installation. See individual catalogs for specific cycle life estimates.

6. PRODUCT CHANGES

Product changes including specifications, features, designs and availability are subject to change at any time without notice. For critical dimensions or specifications, contact factory.

*Many AVENTICS pneumatic valves and cylinders can operate with or without air line lubrication; see individual sales catalogs for details.

-Refer to the appropriate service manual for parts and service information, most are available for download from www.aventics.com/us/downloads

WARRANTIES

7.1 Emerson warrants that:

- Emerson will transfer title to the Goods (excluding Software and Firmware) to Customer under Clause 4 of our Terms and Conditions of Sale*;
- Goods, Documentation and Services will conform with the Specification;
- Goods made by Emerson or its Affiliates will, under normal use and care, be free from defects in materials or workmanship; and
- Emerson and its Affiliates' Personnel delivering Services are trained and will use reasonable skill and care.

7.2 **Warranty Periods.** Unless otherwise specified by Emerson, the warranties in Clause 7.1 apply as follows:

- Goods:** until the earlier of 12 months from the first installation or 18 months from delivery (90 days from delivery in the case of consumables);
- Services:** for 90 days from completion of the Services;
- Goods repaired, replacement items and Services re-performed:** from delivery of the replacement or completion of the repair or re-performance, for 90 days or until the end of the original warranty period (if later).

7.3 **Warranty Procedure.** Clause 7.3 applies if, within the warranty period, Customer discovers any non-conformity with a warranty in Clause 7.1, tells Emerson in writing and, in the case of Goods, returns the non-conforming items at Customer's cost, freight and insurance pre-paid, to the repair facility chosen by Emerson. Where this Clause applies, Emerson will, at its sole option, either:

- correct any non-conforming Documents and Services; or
- repair or replace non-conforming Goods FCA (Incoterms® 2010) at the repair location; or
- instead refund the price of the non-conforming item.

7.4 Exclusions from Warranty.

- The warranties in Clause 7.1(b), (c) and (d) exclude and Customer will pay the cost of all repairs and replacements caused by any of the following: normal wear and use; inadequate maintenance; unsuitable power sources or environmental conditions; improper handling, storage, installation, or operation; misuse or accident caused by anybody except Emerson; a modification or repair not approved by Emerson in writing; materials or workmanship made, provided or specified by Customer; contamination; the use of unapproved parts, firmware or software; Cyber Attack; any other cause not the fault of Emerson.
- Emerson will not pay any costs relating to non-compliance with a warranty in Clause 7.1, except where agreed in writing in advance. Unless accepted in writing by Emerson, Customer will pay:
 - all costs of dismantling, freight, reinstallation and the time and expenses of Emerson Personnel for travel under Clause 7; and
 - all costs incurred by Emerson in correcting nonconformities for which Emerson is not responsible under Clause 7 and in examining items that comply with the warranties in Clause 7.1.
- If Emerson relies on wrong or incomplete information supplied by Customer, all warranties are void unless Emerson agrees otherwise in writing.
- Customer alone is responsible for the selection, maintenance and use of the Goods.
- Resale Products carry only the warranty given by the original manufacturer. Emerson has no liability for Resale Products beyond making a reasonable commercial effort to arrange procurement and shipping of the Resale Products.

7.5 **Disclaimer.** The limited warranties set out in this Clause 7 are the only warranties made by Emerson and can be changed only with Emerson's signed written agreement. THE WARRANTIES AND REMEDIES IN CLAUSE 7 ARE EXCLUSIVE. THERE ARE NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, ABOUT MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE OR ANYTHING ELSE FOR ANY OF THE GOODS, DOCUMENTATION OR SERVICES.

*Additional conditions apply - for full details, visit our website to download our Terms and Conditions of Sale:

For U.S.: www.aventics.com/us/downloads | For Canada: www.aventics.com/ca | (AVENTICS Corporation is owned by Emerson Electric Co.)

AVENTICS Corporation

1953 Mercer Road
Lexington, KY 40511
Tel 859.254.8031
Fax 800.489.1488
www.aventics.com/us
info.us@aventics.com



AVENTICS Incorporated

5515 North Service Rd
Suite #104
Burlington, Ontario L7L 6G4
Tel 905.332.0399
Fax 905.332.8596
www.aventics.com/ca
info.ca@aventics.com

AVENTICS México, S. de R.L. de C.V.

AV. Paseo de la Reforma 250, Esquina Niza
Deleg. Cuauhtémoc
06280 México, D.F.
Tel 866.873.0635
www.aventics.com/mx
info.mx@aventics.com

Further contacts:

www.aventics.com/en/contact

The data specified only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.