

Series 520

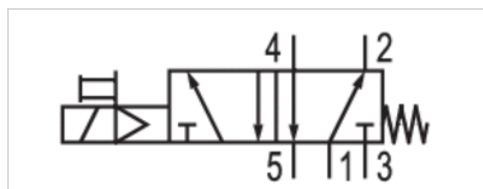


AVENTICS™ Series 520



5/2-directional valve, Series 520

- 5/2
- Qn = 600 l/min
- Pilot valve width : 18 mm
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, EN 175301-803, form C
- Manual override : without detent
- single solenoid
- With spring return
- Pilot : Internal



Type	Spool valve
Activation	Electrically
Pilot	Internal
Sealing principle	Soft sealing
Working pressure min./max.	1.5 ... 8 bar
Control pressure min./max.	1.5 ... 8 bar
Ambient temperature min./max.	5 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m ³
Nominal flow Qn	600 l/min
Connector standard	EN 175301-803
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	20 ms
Typ. switch-off time	30 ms
mounting screws	M3
Weight	0.095 kg

Technical data

Part No.	Compressed air connection		Operational voltage AC 50 Hz
	Input	Output	
52000386	G 1/8	G 1/8	-
52000387	G 1/8	G 1/8	-
52000388	G 1/8	G 1/8	-
52000380	G 1/8	G 1/8	24 V

Part No.	Operational voltage AC 60 Hz	Power consumption	
		DC	AC 50 Hz
52000386	24 V	-	2 VA
52000387	110 V	-	2 VA
52000388	230 V	-	2 VA
52000380	-	1.6 W	-

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

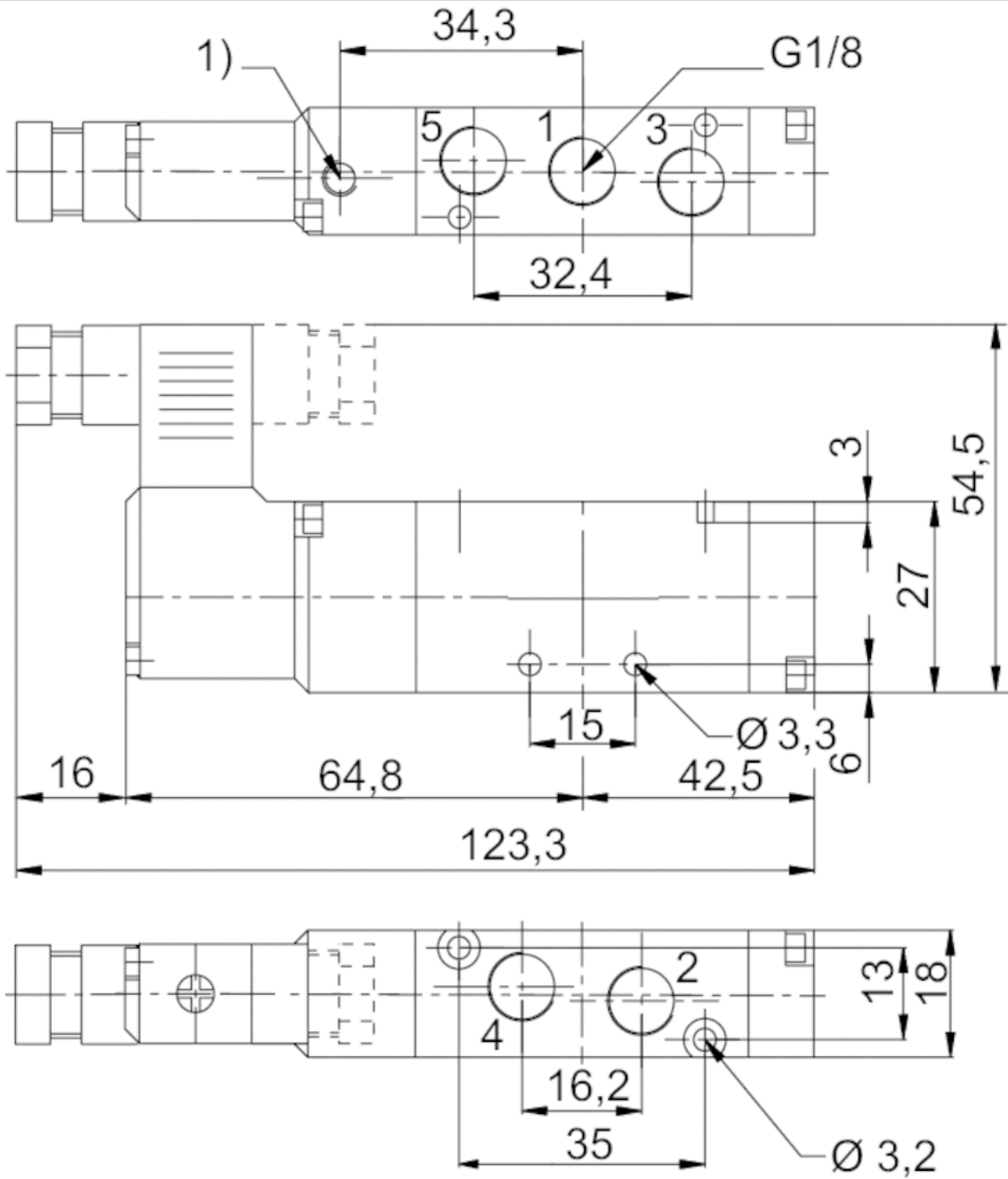
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	Aluminum, anodized
Seals	Nitrile butadiene rubber
Front plate	Polyoxymethylene
Threaded bushing	Aluminum

Dimensions

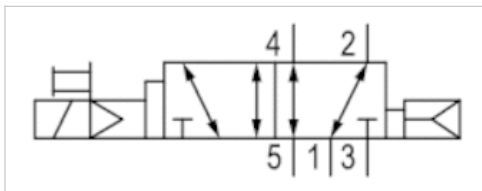
Dimensions



1) Pilot Exhaust

5/2-directional valve, Series 520

- 5/2
- Qn = 600 l/min
- Pilot valve width : 18 mm
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, EN 175301-803, form C
- Manual override : without detent
- single solenoid
- Air return with differential piston
- Pilot : Internal



Type	Spool valve
Activation	Electrically
Pilot	Internal
Sealing principle	Soft sealing
Working pressure min./max.	1.5 ... 8 bar
Control pressure min./max.	1.5 ... 8 bar
Ambient temperature min./max.	5 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m³
Nominal flow Qn	600 l/min
Connector standard	EN 175301-803
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	20 ms
Typ. switch-off time	30 ms
mounting screws	M3
Weight	0.095 kg

Technical data

Part No.	Compressed air connection		Operational voltage
	Input	Output	
52000002	G 1/8	G 1/8	-
52000003	G 1/8	G 1/8	-
52000004	G 1/8	G 1/8	-
52000001	G 1/8	G 1/8	24 V

Part No.	Operational voltage	Power consumption	
		DC	AC 50 Hz
52000002	24 V	-	2 VA
52000003	110 V	-	2 VA
52000004	230 V	-	2 VA
52000001	-	1.6 W	-

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

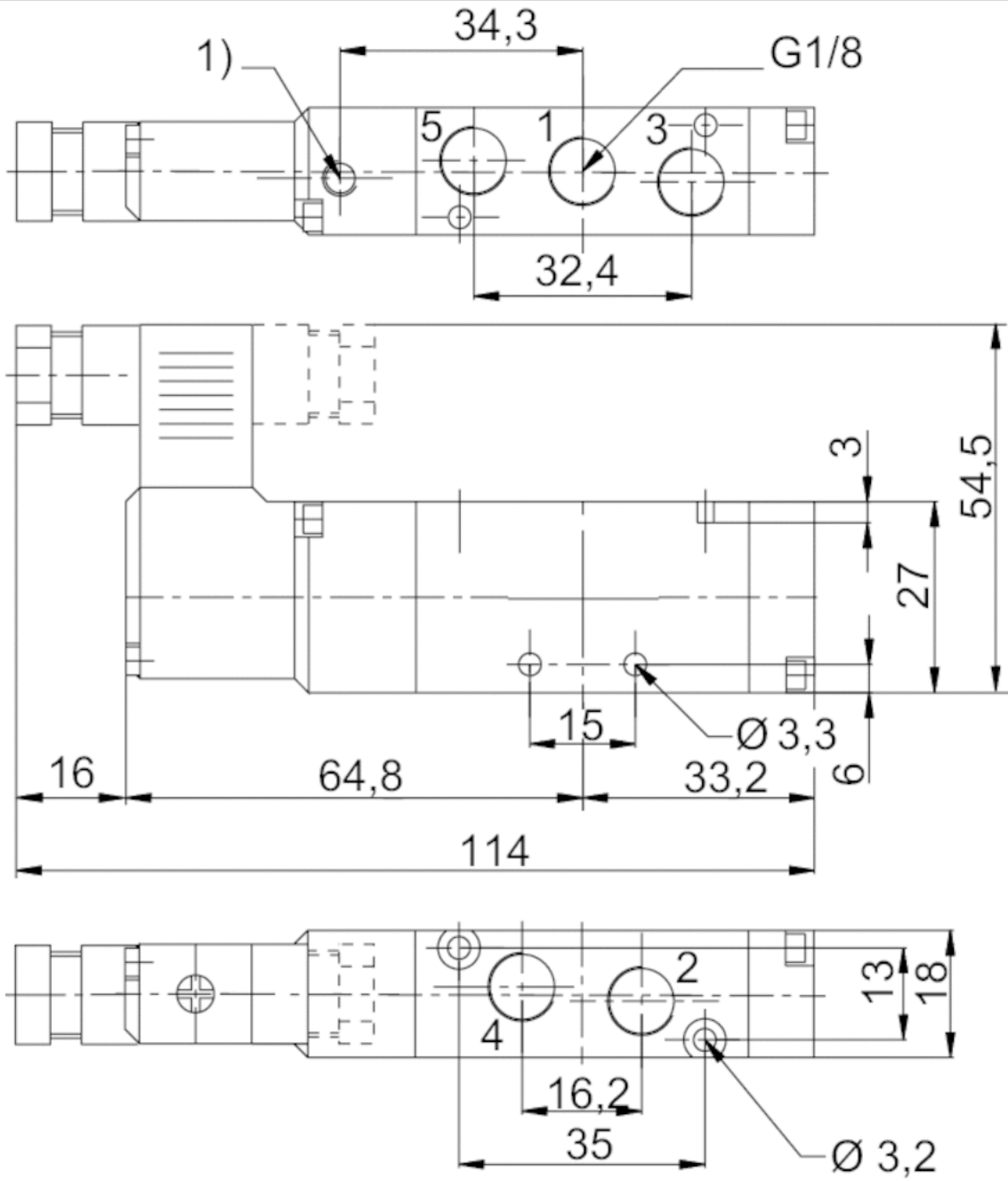
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	Aluminum, anodized
Seals	Nitrile butadiene rubber
Front plate	Polyoxymethylene
Threaded bushing	Aluminum

Dimensions

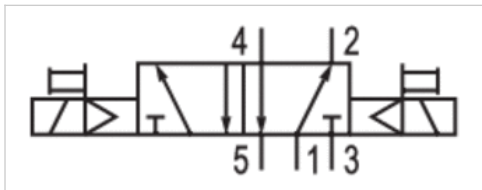
Dimensions



1) Pilot Exhaust

5/2-directional valve, Series 520

- 5/2
- Qn = 600 l/min
- Pilot valve width : 18 mm
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, EN 175301-803, form C
- Manual override : without detent
- double solenoid
- Pilot : Internal



Type	Spool valve
Activation	Electrically
Pilot	Internal
Sealing principle	Soft sealing
Working pressure min./max.	1.5 ... 8 bar
Control pressure min./max.	1.5 ... 8 bar
Ambient temperature min./max.	5 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m³
Nominal flow Qn	600 l/min
Connector standard	EN 175301-803
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	20 ms
mounting screws	M3
Weight	0.16 kg

Technical data

Part No.	Compressed air connection		Operational voltage
	Input	Output	
52000006	G 1/8	G 1/8	-
52000007	G 1/8	G 1/8	-
52000008	G 1/8	G 1/8	-
52000005	G 1/8	G 1/8	24 V

Part No.	Operational voltage	Power consumption	
		DC	AC 50 Hz
52000006	24 V	-	2 VA
52000007	110 V	-	2 VA
52000008	230 V	-	2 VA
52000005	-	1.6 W	-

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

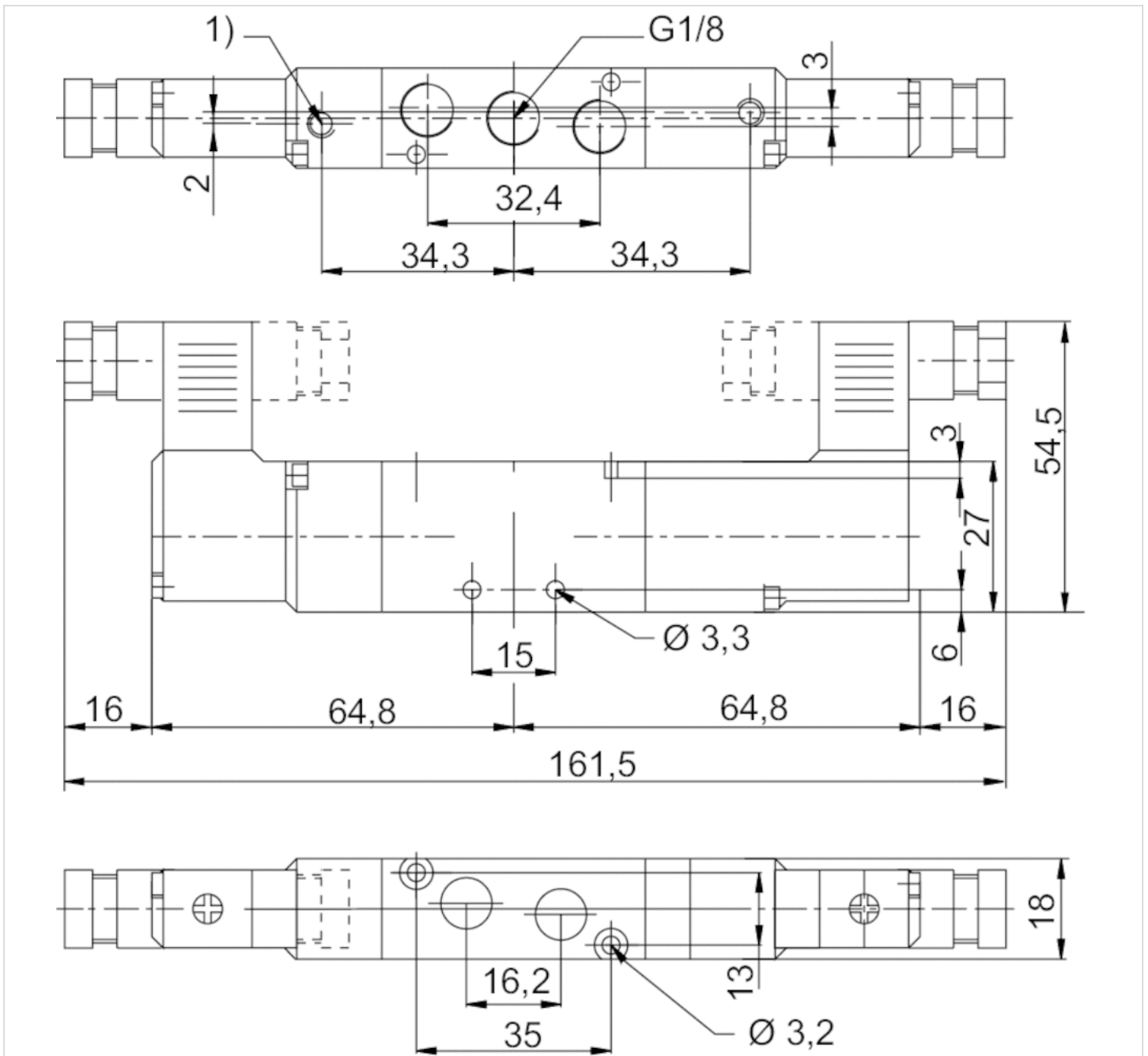
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	Aluminum, anodized
Seals	Nitrile butadiene rubber
Front plate	Polyoxymethylene
Threaded bushing	Aluminum

Dimensions

Dimensions



1) Pilot Exhaust

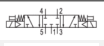







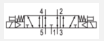



5/3-directional valve, Series 520

- 5/3
- Qn = 600 l/min
- Pilot valve width : 18 mm
- closed center pressurized center exhausted center
- Pipe connection
- Compressed air connection output : G 1/8
- Electrical connection : Plug, EN 175301-803, form C
- Manual override : without detent
- double solenoid
- Pilot : Internal



Type	Spool valve
Activation	Electrically
Pilot	Internal
Sealing principle	Soft sealing
Working pressure min./max.	1.5 ... 8 bar
Control pressure min./max.	1.5 ... 8 bar
Ambient temperature min./max.	5 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m ³
Nominal flow Qn	600 l/min
Connector standard	EN 175301-803
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	20 ms
Typ. switch-off time	50 ms
mounting screws	M3
Weight	0.17 kg

Technical data

Part No.			Compressed air connection
			Input
52000010		closed center	G 1/8
52000011		closed center	G 1/8
52000012		closed center	G 1/8
52000009		closed center	G 1/8
52000126		pressurized center	G 1/8
52000127		pressurized center	G 1/8
52000128		pressurized center	G 1/8
52000129		pressurized center	G 1/8
52000087		exhausted center	G 1/8
52000088		exhausted center	G 1/8
52000089		exhausted center	G 1/8
52000090		exhausted center	G 1/8

Part No.	Compressed air connection	Operational voltage	Operational voltage
	Output	DC	AC 50 Hz
52000010	G 1/8	-	24 V
52000011	G 1/8	-	110 V
52000012	G 1/8	-	230 V
52000009	G 1/8	24 V	-
52000126	G 1/8	-	24 V
52000127	G 1/8	-	110 V
52000128	G 1/8	-	230 V
52000129	G 1/8	24 V	-
52000087	G 1/8	-	24 V
52000088	G 1/8	-	110 V
52000089	G 1/8	-	230 V
52000090	G 1/8	24 V	-

Part No.	Power consumption	Switch-on power
	DC	AC 50 Hz
52000010	-	2 VA
52000011	-	2 VA
52000012	-	2 VA
52000009	1.6 W	-
52000126	-	2 VA
52000127	-	2 VA
52000128	-	2 VA
52000129	1.6 W	-
52000087	-	2 VA
52000088	-	2 VA
52000089	-	2 VA
52000090	1.6 W	-

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

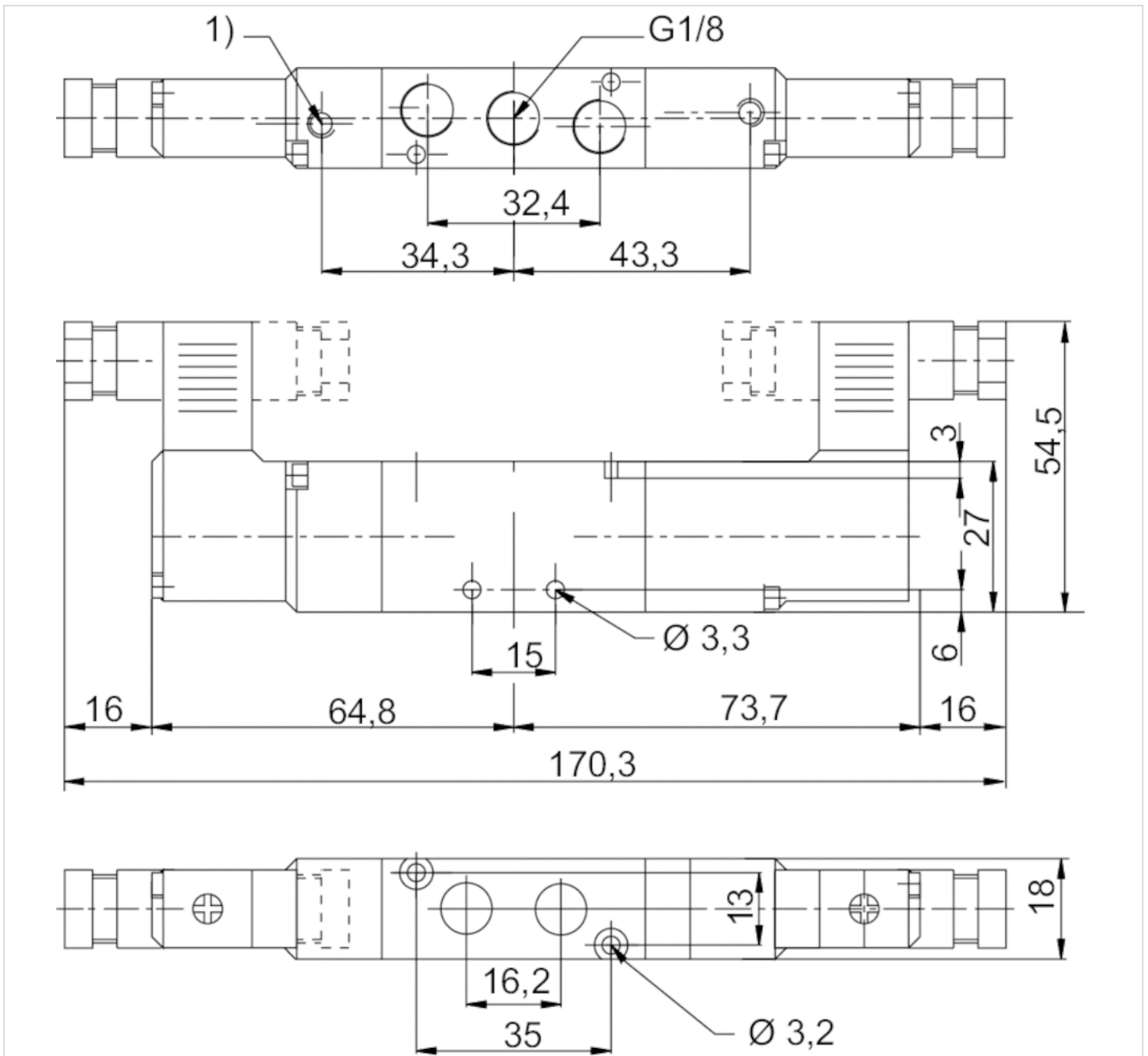
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	Aluminum, anodized
Seals	Nitrile butadiene rubber
Front plate	Polyoxymethylene
Threaded bushing	Aluminum

Dimensions

Dimensions



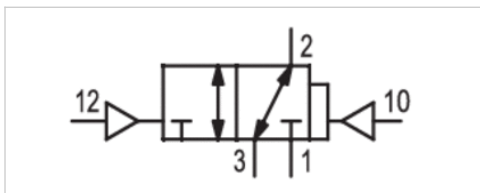
1) Pilot Exhaust

3/2-directional valve, Series 520

- Qn = 400 l/min
- Compressed air connection output G 1/8
- Single air pilot
- With differential piston
- Pipe connection



Type	Spool valve
Activation	pneumatically
Pilot	External
Sealing principle	Soft sealing
Flow rate value Qn	400 l/min
Working pressure min./max.	1.5 ... 8 bar
Control pressure min./max.	1.5 ... 8 bar
Ambient temperature min./max.	5 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m ³
Mounting screw	M2.5 with slot
Weight	0.45 kg



Technical data

Part No.	Compressed air connection	
	Input	Output
52000376	G 1/8	G 1/8

Technical information

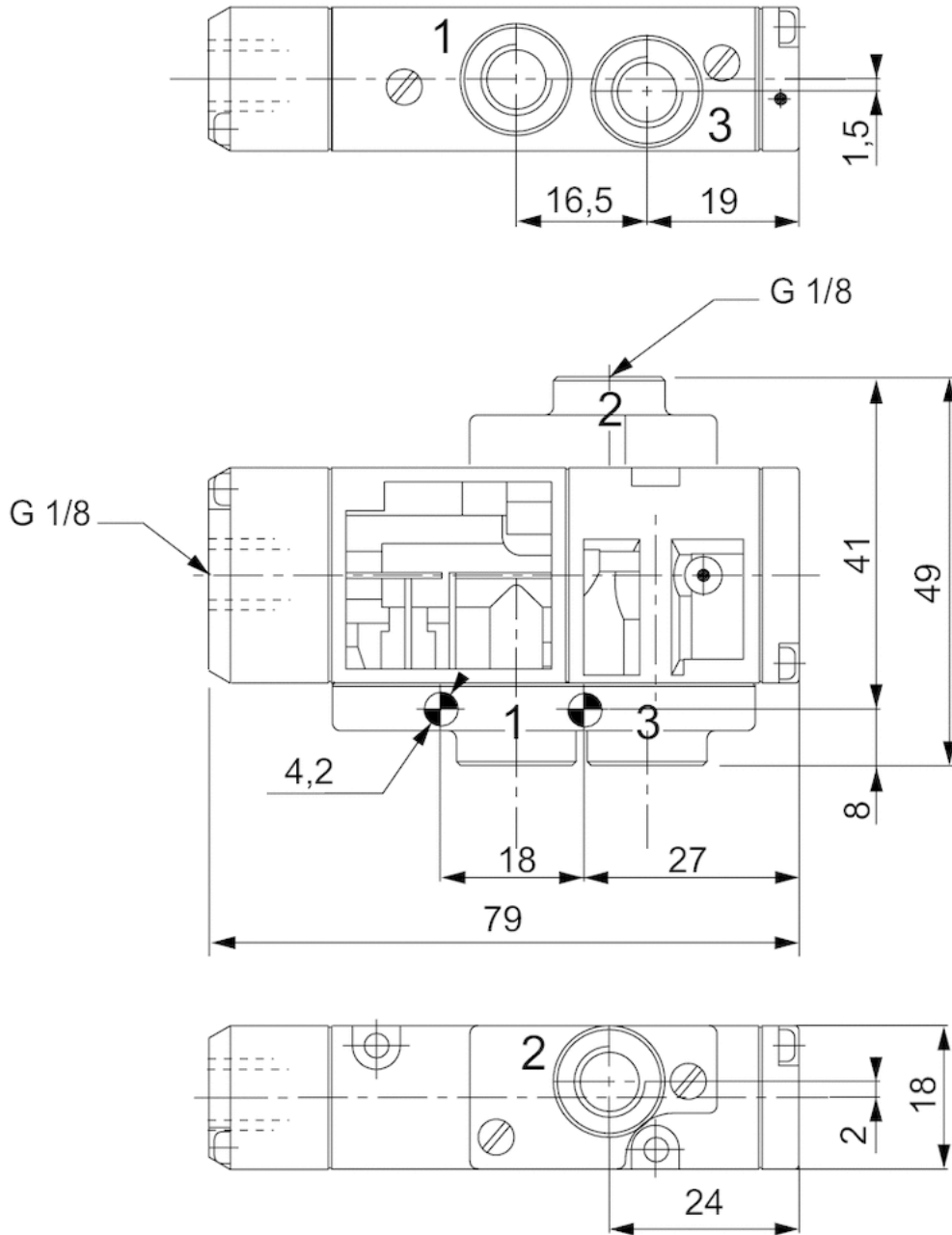
The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
 The oil content of compressed air must remain constant during the life cycle.
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	Aluminum, anodized
Seals	Nitrile butadiene rubber
Front plate	Polyoxymethylene
Threaded bushing	Aluminum

Dimensions

Dimensions

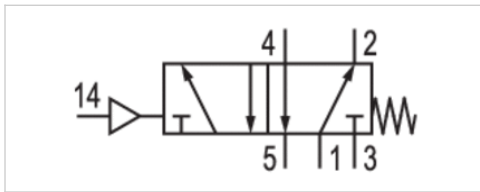


5/2-directional valve, Series 520

- Qn = 400 l/min
- Compressed air connection output G 1/8
- With spring return
- Pipe connection



Type	Spool valve
Activation	pneumatically
Pilot	External
Sealing principle	Soft sealing
Flow rate value Qn	400 l/min
Working pressure min./max.	0 ... 8 bar
Control pressure min./max.	1.5 ... 8 bar
Ambient temperature min./max.	5 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m ³
Mounting screw	M3
Weight	0.065 kg



Technical data

Part No.	Compressed air connection	
	Input	Output
52000330	G 1/8	G 1/8

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

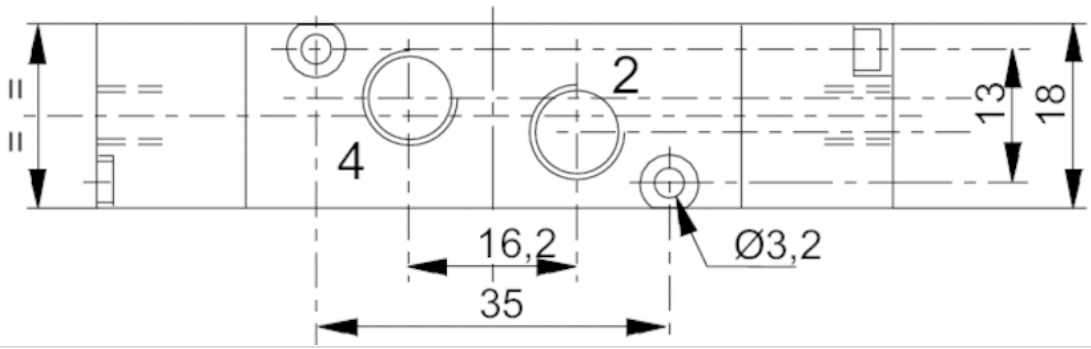
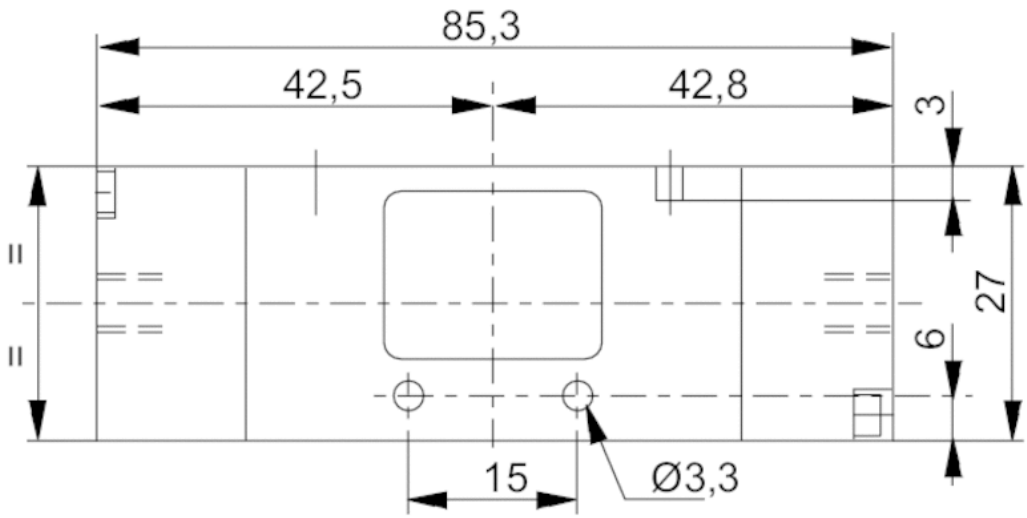
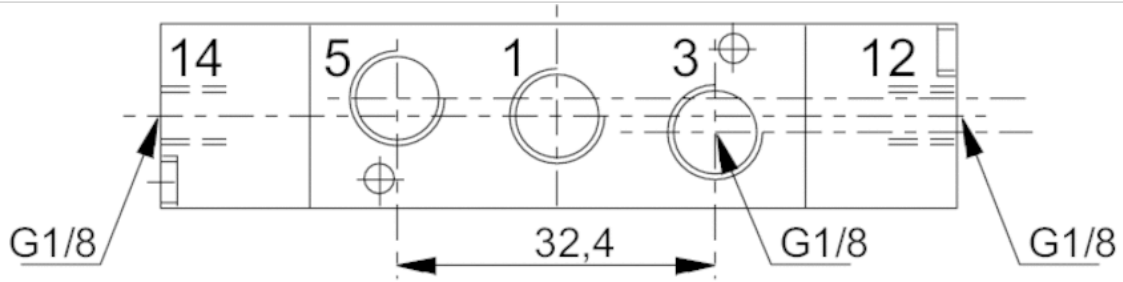
The oil content of compressed air must remain constant during the life cycle.

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

Technical information

Material	
Housing	Aluminum, anodized
Seals	Nitrile butadiene rubber
Front plate	Polyoxymethylene
Threaded bushing	Aluminum

Dimensions

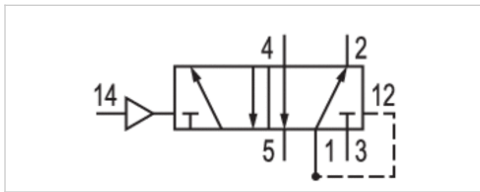


5/2-directional valve, Series 520

- Qn = 600 l/min
- Compressed air connection output G 1/8
- With differential piston
- Pipe connection



Type	Spool valve
Activation	pneumatically
Pilot	External
Sealing principle	Soft sealing
Flow rate value Qn	600 l/min
Working pressure min./max.	1.5 ... 8 bar
Control pressure min./max.	1.5 ... 8 bar
Ambient temperature min./max.	5 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m ³
Mounting screw	M3
Weight	0.065 kg



Technical data

Part No.	Compressed air connection	
	Input	Output
52000077	G 1/8	G 1/8

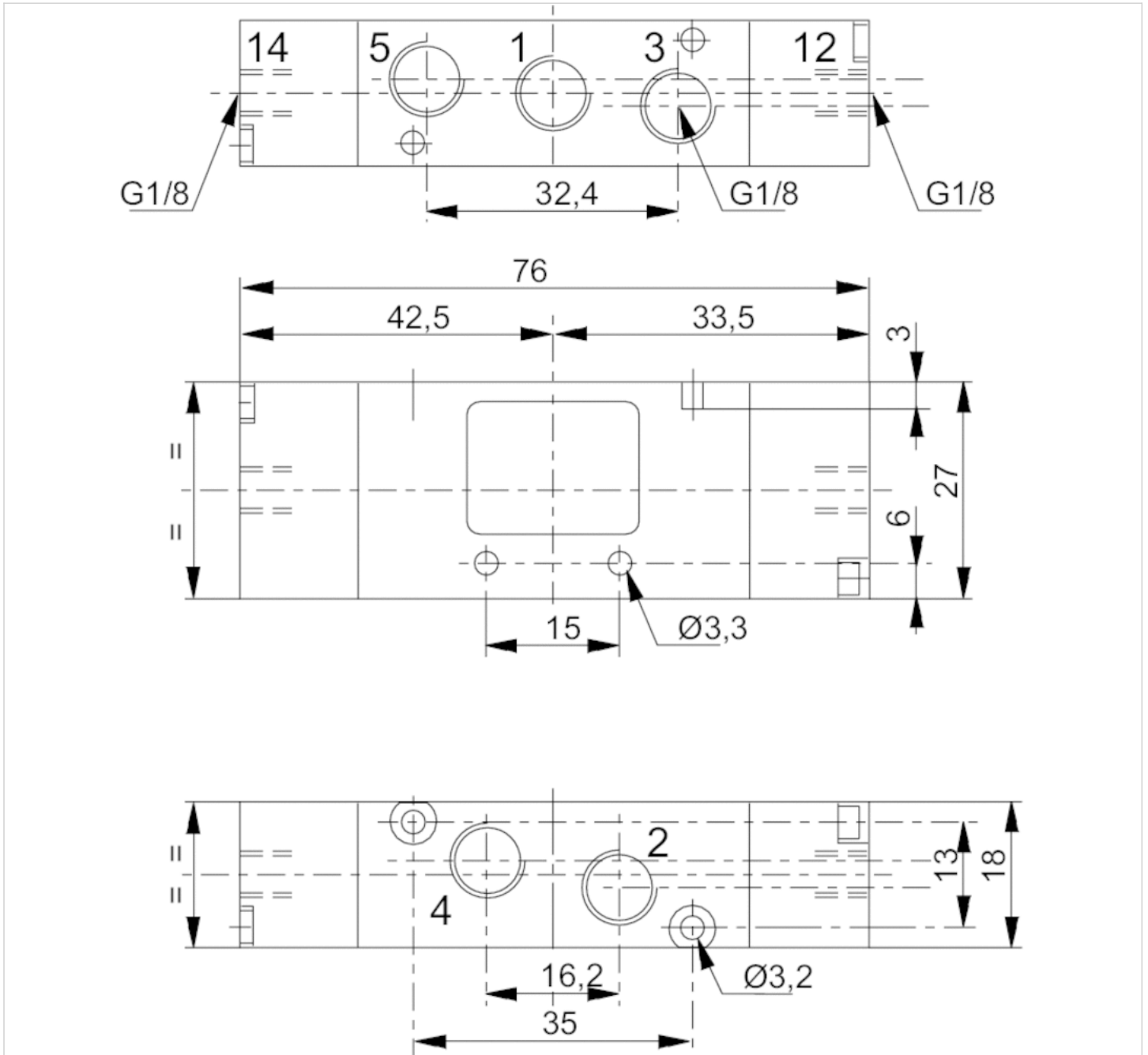
Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
 The oil content of compressed air must remain constant during the life cycle.
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	Aluminum, anodized
Seals	Nitrile butadiene rubber
Front plate	Polyoxymethylene
Threaded bushing	Aluminum

Dimensions

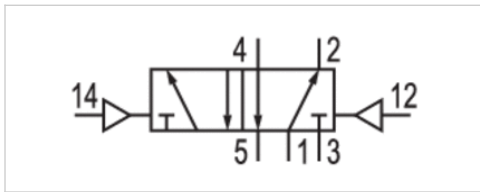


5/2-directional valve, Series 520

- Qn = 600 l/min
- Compressed air connection output G 1/8
- double air pilot
- Pipe connection



Type	Spool valve
Activation	pneumatically
Pilot	External
Sealing principle	Soft sealing
Flow rate value Qn	600 l/min
Working pressure min./max.	0 ... 8 bar
Control pressure min./max.	1.5 ... 8 bar
Ambient temperature min./max.	5 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m ³
Mounting screw	M3
Weight	0.065 kg



Technical data

Part No.	Compressed air connection	
	Input	Output
52000078	G 1/8	G 1/8

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

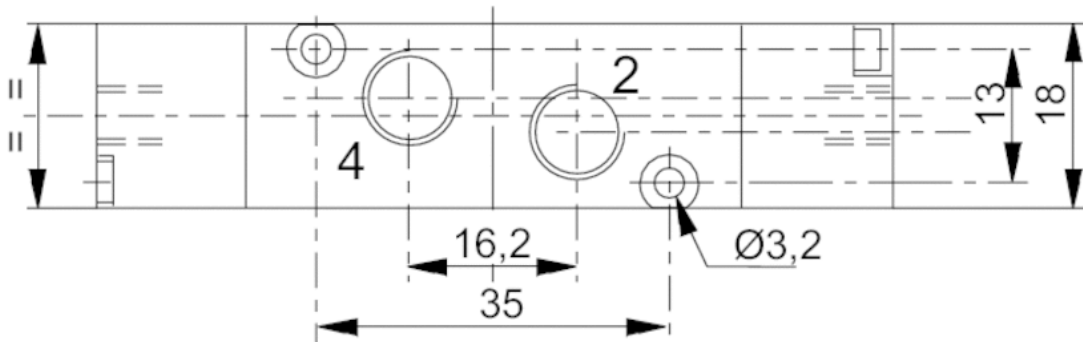
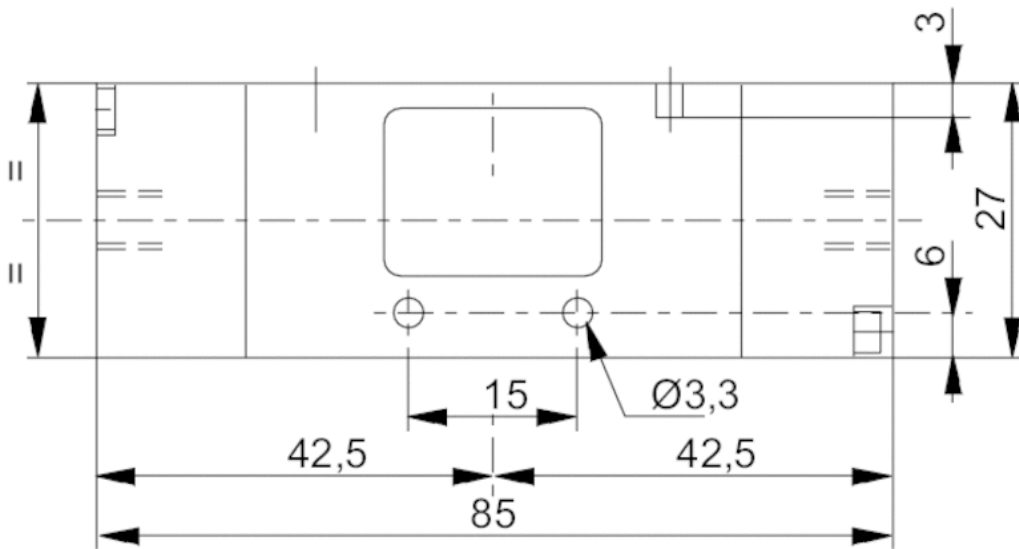
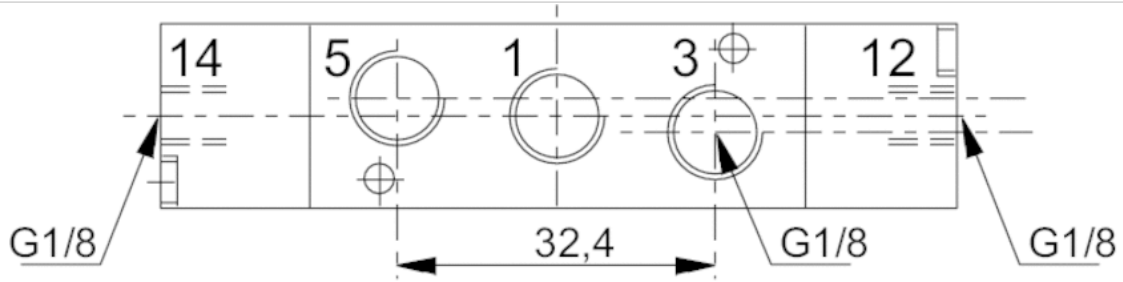
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	Aluminum, anodized
Seals	Nitrile butadiene rubber
Front plate	Polyoxymethylene
Threaded bushing	Aluminum

Dimensions

Dimensions






5/3-directional valve, Series 520

- Qn = 600 l/min
- Compressed air connection output G 1/8
- Pipe connection



Type	Spool valve
Activation	pneumatically
Pilot	External
Sealing principle	Soft sealing
Flow rate value Qn	600 l/min
Working pressure min./max.	0 ... 8 bar
Control pressure min./max.	1.5 ... 8 bar
Ambient temperature min./max.	5 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 5 mg/m ³
Mounting screw	M4
Weight	0.075 kg

Technical data

Part No.			Compressed air connection
			Input
52000079		closed center	G 1/8
52000142		pressurized center	G 1/8
52000082		exhausted center	G 1/8

Part No.	Compressed air connection
	Output
52000079	G 1/8
52000142	G 1/8
52000082	G 1/8

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

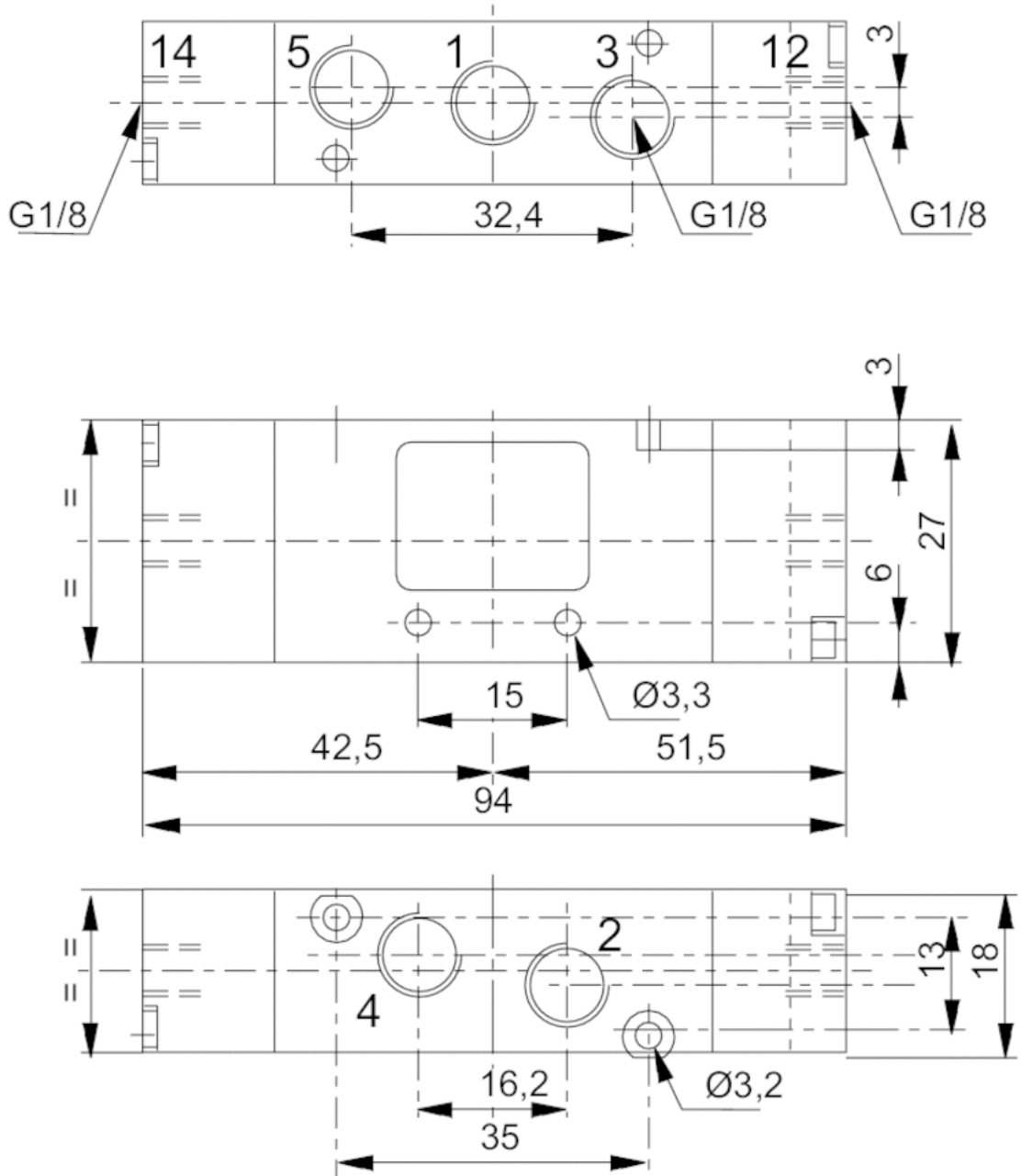
The oil content of compressed air must remain constant during the life cycle.

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

Technical information

Material	
Housing	Aluminum, anodized
Seals	Nitrile butadiene rubber
Front plate	Polyoxymethylene
Threaded bushing	Aluminum

Dimensions



Series 355

- for 520



Weight

See table below

Technical data

Part No.	Suitable for Series	Port	Number of valve positions	Weight
35500333	aluminum base plates	G 1/8	2	0.145 kg
35500334	aluminum base plates	G 1/8	3	0.195 kg
35500335	aluminum base plates	G 1/8	4	0.24 kg
35500336	aluminum base plates	G 1/8	5	0.29 kg
35500337	aluminum base plates	G 1/8	6	0.34 kg
35500338	aluminum base plates	G 1/8	7	0.385 kg
35500339	aluminum base plates	G 1/8	8	0.435 kg
35500340	aluminum base plates	G 1/8	9	0.485 kg
35500341	aluminum base plates	G 1/8	10	0.53 kg

Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

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

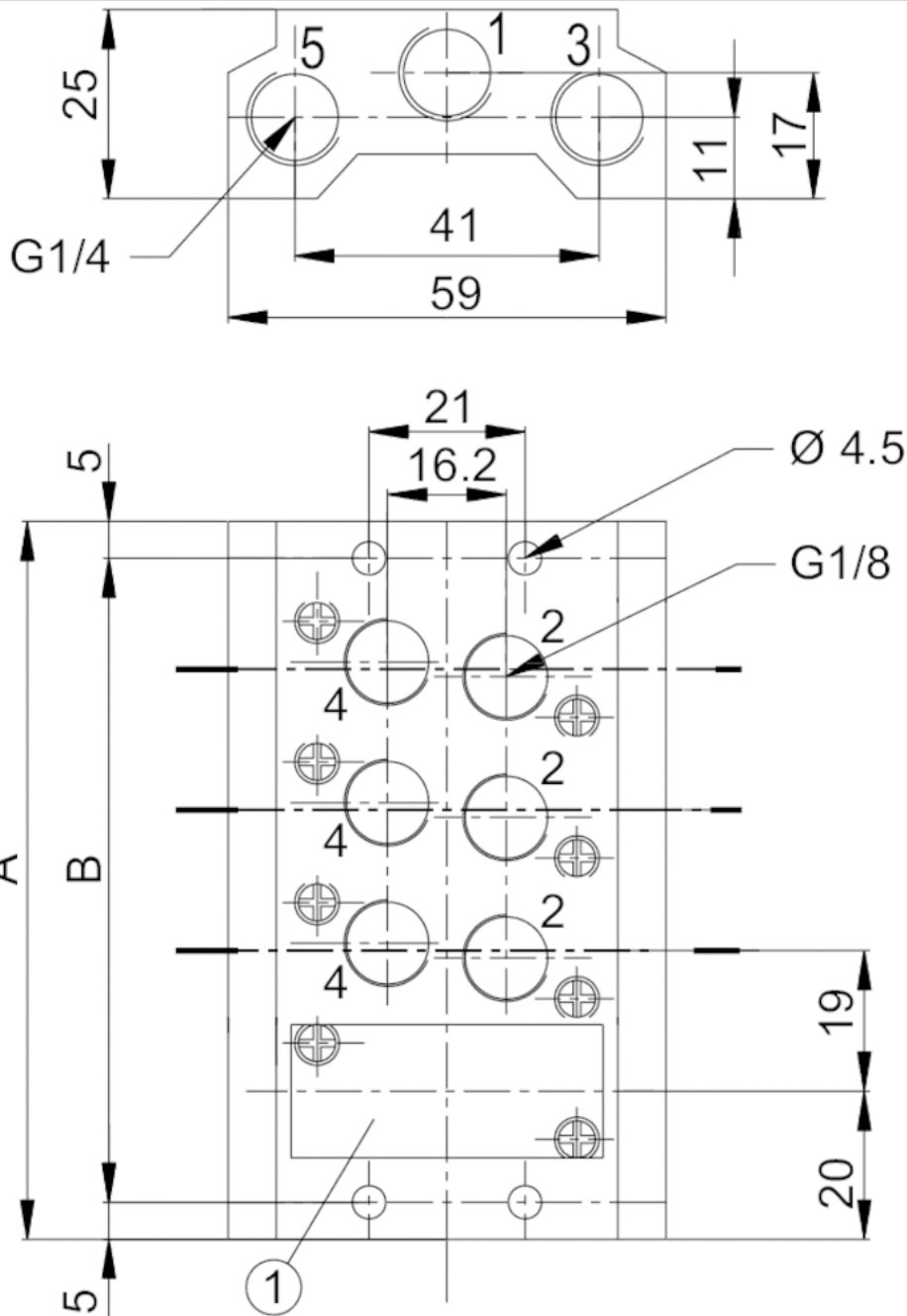
Technical information

Material

Base plate	Aluminum
------------	----------

Dimensions

Dimensions



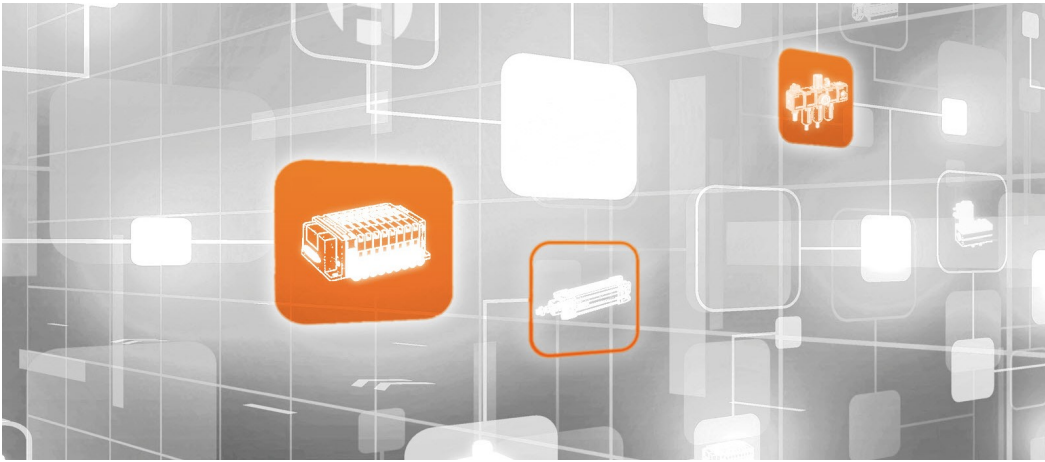
1) Blanking plate

Dimensions

Part No.	A	B
35500333	59	49
35500334	78	68
35500335	97	87
35500336	116	106
35500337	135	125
35500338	154	144

Part No.	A	B
35500339	173	163
35500340	192	182
35500341	211	201

Efficient pneumatic solutions, our program: cylinders and drives, valves and valve systems, air supply management



Visit us: [Emerson.com/Aventics](https://www.emerson.com/Aventics)

Your local contact: [Emerson.com/contactus](https://www.emerson.com/contactus)



[Emerson.com](https://www.emerson.com)



[Facebook.com/EmersonAutomationSolutions](https://www.facebook.com/EmersonAutomationSolutions)



[LinkedIn.com/company/Emerson-Automation-Solutions](https://www.linkedin.com/company/Emerson-Automation-Solutions)



[Twitter.com/EMR_Automation](https://twitter.com/EMR_Automation)

An example configuration is depicted on the title page. The delivered product may thus vary from that in the illustration. Subject to change. This Document, as well as the data, specifications and other information set forth in it, are the exclusive property of AVENTICS GmbH. It may not be reproduced or given to third parties without its consent. Only use the AVENTICS products shown in industrial applications. Read the product documentation completely and carefully before using the product. Observe the applicable regulations and laws of the respective country. When integrating the product into applications, note the system manufacturer's specifications for safe use of the product. 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 judgement and verification. It must be remembered that the products are subject to a natural process of wear and aging.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Brand logotype are registered trademarks of one of the Emerson family of companies. All other marks are the property of their respective owners. © 2021 Emerson Electric Co. All rights reserved.
2021-04



CONSIDER IT SOLVED™