

AVENTICS®

Directional valves ▶ Pneumatically operated










Series 563, 565, 567

Brochure



Directional valves ▶ Pneumatically operated

Series 563, 565, 567

	3/2-directional valve, Series 563 ▶ Qn = 1350 l/min ▶ plate connection ▶ Compressed air connection output: G 1/4	3
	3/2-directional valve, Series 565 ▶ Qn = 4240 l/min ▶ plate connection ▶ Compressed air connection output: G 1/2	4
	3/2-directional valve, Series 567 ▶ Qn = 13620 l/min ▶ plate connection ▶ Compressed air connection output: G 1	5
Accessories		
	Single subbase, for series 563-565 ▶ thread connections on the bottom ▶ Compressed air connection output: G 1/4 - G 1/2	6
	Single subbase, Series 563, 565, 567 ▶ thread connections on the side ▶ Compressed air connection output: G 1/4 - G 1 1/2	7
	Base plate, Series 563, 565 ▶ Compressed air connection output: G 1/4 - G 1/2 ▶ Can be assembled into blocks	9
	End plate kit, Series 563, 565 ▶ Can be assembled into blocks	10
	Blanking plate, for series 563-565	11
	Separator	11
	Silencers, Series SI1 ▶ Sintered bronze	12
	Silencers, Series SI1 ▶ Sintered bronze	13

Directional valves ▶ Pneumatically operated

3/2-directional valve, Series 563

▶ Qn = 1350 l/min ▶ plate connection ▶ Compressed air connection output: G 1/4



5600-131

Version	Poppet valve
Working pressure min./max.	See table below
Control pressure min./max.	See table below
Ambient temperature min./max.	See table below
Medium temperature min./max.	See table below
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m³ - 5 mg/m³

Materials:

Housing	Aluminum
Seals	Acrylonitrile butadiene styrene

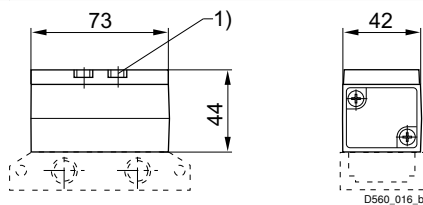
Technical Remarks

- 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, see chapter „Technical information“.

	Compressed air connection		Flow rate value	Working pressure min./max.	Control pressure min./max.	Ambient temperature min./max.	Medium temperature min./max.	Weight	Note	Part No.
	Input	Output								
			[l/min]	[bar]	[bar]	[°C]	[°C]	[kg]		
	G 1/4	G 1/4	1350	-1 / 10	3.5 / 10	-20 °C / +70 °C	-20 °C / +70 °C	0.3	-	5632010000
				-1 / 30	5.5 / 10	-20 °C / +70 °C	-20 °C / +70 °C		-	5632310000
				-1 / 10	3.5 / 10	-20 °C / +120 °C	-20 °C / +120 °C		1)	5632510000

1) Seal: Fluorocacoutchouc
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions

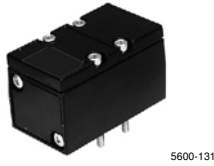


1) Tightening torque for mounting screws: 2.7 ± 0.3 Nm
Base plate not included in the scope of delivery

Directional valves ▶ Pneumatically operated

3/2-directional valve, Series 565

▶ Qn = 4240 l/min ▶ plate connection ▶ Compressed air connection output: G 1/2



Version	Poppet valve
Working pressure min./max.	See table below
Control pressure min./max.	See table below
Ambient temperature min./max.	See table below
Medium temperature min./max.	See table below
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³

Materials:

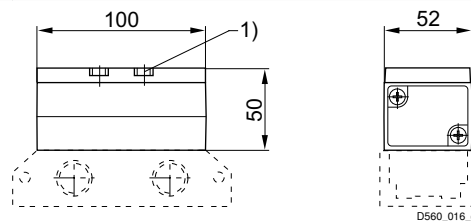
Housing	Aluminum
Seals	Acrylonitrile butadiene styrene

Technical Remarks

- 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, see chapter „Technical information“.

	Compressed air connection		Flow rate value	Working pressure min./max.	Control pressure min./max.	Ambient temperature min./max.	Medium temperature min./max.	Weight	Note	Part No.
	Input	Output								
				[l/min]	[bar]	[bar]	[°C]	[°C]	[kg]	
	G 1/2	G 1/2	4240	-1 / 10	3.5 / 10	-20 °C / +70 °C	-20 °C / +70 °C	0.55	-	5652010000
				-1 / 30	5.5 / 10	-20 °C / +70 °C	-20 °C / +70 °C		-	5652310000
				-1 / 10	3.5 / 10	-20 °C / +120 °C	-20 °C / +120 °C		1)	5652510000
1) Seal: Fluorocautchouc Nominal flow Qn at 6 bar and Δp = 1 bar										

Dimensions



- 1) Tightening torque for mounting screws: 5.5 ± 0.5 Nm
 Base plate not included in the scope of delivery

Directional valves ▶ Pneumatically operated

3/2-directional valve, Series 567

▶ Qn = 13620 l/min ▶ plate connection ▶ Compressed air connection output: G 1



Version	Poppet valve
Working pressure min./max.	See table below
Control pressure min./max.	See table below
Ambient temperature min./max.	See table below
Medium temperature min./max.	See table below
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m³ - 5 mg/m³

Materials:	
Housing	Aluminum
Seals	Acrylonitrile butadiene styrene

Technical Remarks

- 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, see chapter „Technical information“.

	Compressed air connection		Flow rate value	Working pressure min./max.	Control pressure min./max.	Ambient temperature min./max.	Medium temperature min./max.	Weight	Note	Part No.
	Input	Output								
				[l/min]	[bar]	[bar]	[°C]	[°C]	[kg]	
	G 1	G 1	13620	-1 / 10	3.5 / 10	-20 °C / +70 °C	-20 °C / +70 °C	1.8	-	5672010000
				-1 / 30	5.5 / 10	-20 °C / +70 °C	-20 °C / +70 °C		-	5672310000
				-1 / 10	3.5 / 10	-20 °C / +120 °C	-20 °C / +120 °C		1)	5672510000
1) Seal: Fluorocautchouc Nominal flow Qn at 6 bar and Δp = 1 bar										

Fig. 1

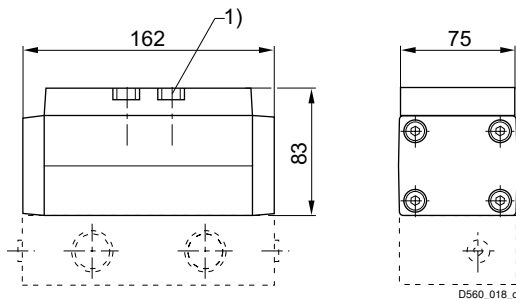


Fig. 2

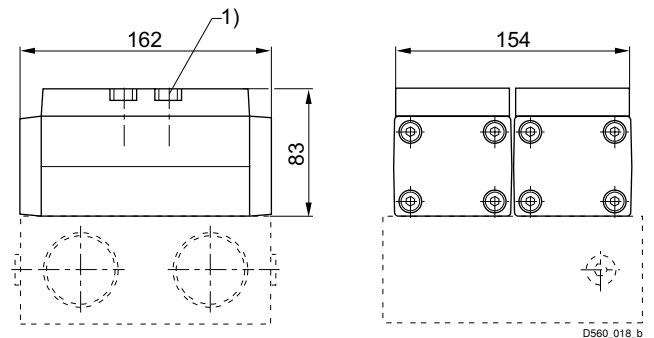


Fig. 1: valve 567, G1
 Fig. 2: 2 x valve 567, G 1 1/2. Two parallel 567 valves on subbase 568-442.
 1) Tightening torque for mounting screws: 22 ± 2 Nm
 Base plate not included in the scope of delivery

Series 563, 565, 567 Accessories

Single subbase, for series 563-565

▶ thread connections on the bottom ▶ Compressed air connection output: G 1/4 - G 1/2



5600-263

Ambient temperature min./max.	-20°C / +120°C
Medium temperature min./max.	-20°C / +120°C
Medium	Compressed air
Working pressure min./max.	-1 bar / 30 bar
Number of valve positions	1
Surface	painted
Direction of pneumatic port (1)	Down
Direction of pneumatic port (3,5)	Down
Direction of pneumatic port (2,4)	Down
Direction of pneumatic port (12)	Down
Direction of pneumatic port (14)	Down

Materials:
Base plate

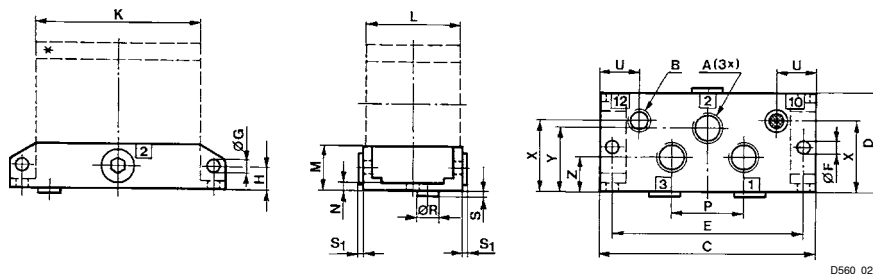
Die-cast aluminum, black painted

Technical Remarks

- 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, see chapter „Technical information“.

Suitable for Series	Compressed air connection				Weight [kg]	Part No.
	Input [1]	Output [2 / 4]	Exhaust [3 / 5]	Pilot connection [14]		
563	G 1/4	G 1/4	G 1/4	G 1/8	0.16	R402003177
565	G 3/8	G 3/8	G 3/8	G 1/8	0.39	5644410000
	G 1/2	G 1/2	G 1/2	G 1/8	0.37	5654410000

Dimensions



Part No.	A	B	C	D	E	F	G	H	K	L	M	N
R402003177	G 1/4	G 1/8	96	44	85	5.3	5.1	10	73	42	20	4
5644410000	G 3/8	G 1/8	128	56	114	6.5	6.1	17	100	52	32	6
5654410000	G 1/2	G 1/8	128	56	114	6.5	6.1	17	100	52	32	6

Part No.	P	R	S	S1	U	X	Y	Z	Weight kg
R402003177	32	11	2	3	17.5	28.5	28.5	15.5	0.16

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

Pneumatics catalog, online PDF, as of 2016-10-31, ©AVENTICS S.à r.l., subject to change

Directional valves ▶ Pneumatically operated

Series 563, 565, 567 Accessories

Part No.	P	R	S	S1	U	X	Y	Z	Weight kg			
5644410000	56	11	2	3.5	21.5	40	36	20	0.39			
5654410000	56	11	2	3.5	21.5	40	36	20	0.37			

Single subbase, Series 563, 565, 567

▶ thread connections on the side ▶ Compressed air connection output: G 1/4 - G 1 1/2



5600-283

Ambient temperature min./max.	-20 °C / +120 °C
Medium temperature min./max.	-20 °C / +120 °C
Medium	Compressed air
Working pressure min./max.	-1 bar / 42 bar
Number of valve positions	1
Surface	painted
Direction of pneumatic port (1)	On the side
Direction of pneumatic port (3,5)	On the side
Direction of pneumatic port (2,4)	On the side
Direction of pneumatic port (12)	On the side
Direction of pneumatic port (14)	On the side
Materials:	
Base plate	Die-cast aluminum, black painted

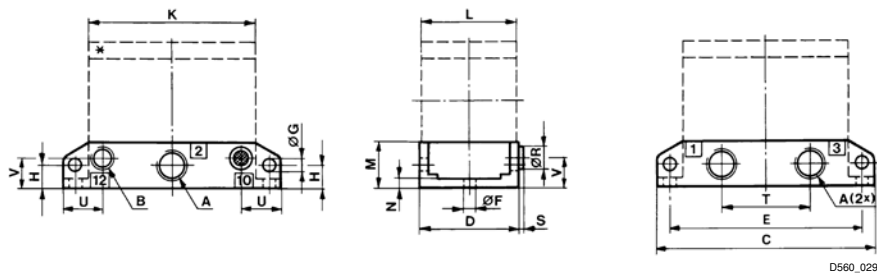
Technical Remarks

- 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, see chapter „Technical information“.

Suitable for Series	Compressed air connection				Weight [kg]	Fig.	Part No.
	Input	Output	Exhaust	Pilot connection			
	[1]	[2 / 4]	[3 / 5]	[14]			
563	G 1/4	G 1/4	G 1/4	G 1/8	0.13	Fig. 1	5634420000
565	G 3/8	G 3/8	G 3/8	G 1/8	0.37	Fig. 1	5644420000
	G 1/2	G 1/2	G 1/2		0.32		5654420000
567	G 3/4	G 3/4	G 3/4	G 1/8	1.1	Fig. 2	5664420000
	G 1	G 1	G 1		1		5674420000
2x 567	G 1 1/2	G 1 1/2	G 1 1/2	G 1/4	3.7	Fig. 3	5684420000

Series 563, 565, 567 Accessories

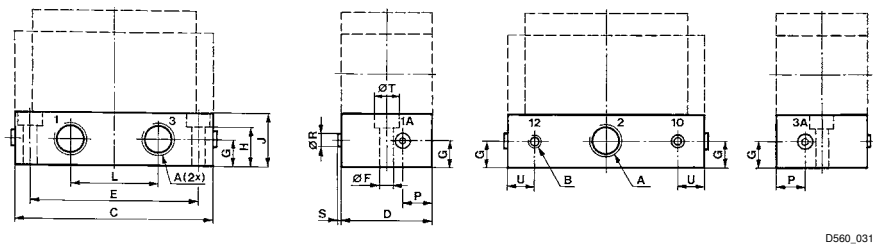
Fig. 1



Part No.	A	B	C	D	E	F	G	H	K	L	M	N
5634420000	G 1/4	G 1/8	96	44	85	5.3	5.1	10	73	42	20	4
5644420000	G 3/8	G 1/8	128	56	114	6.5	6.1	17	100	52	32	6
5654420000	G 1/2	G 1/8	128	56	114	6.5	6.1	17	100	52	32	6

Part No.	R	S	T	U	V	Weight kg						
5634420000	10	2	39	17.5	13	0.13						
5644420000	10	2	56	21.5	23.5	0.37						
5654420000	10	2	56	21.5	23.5	0.32						

Fig. 2



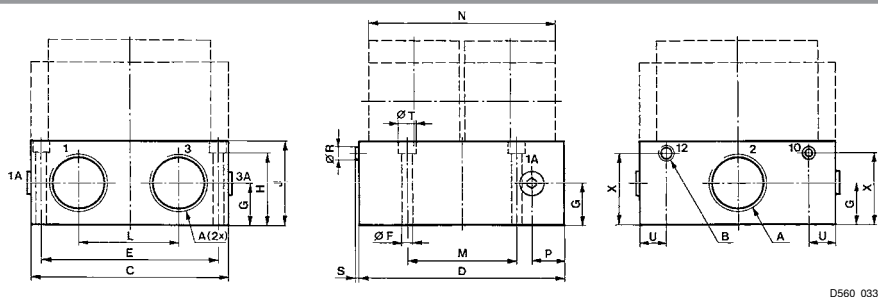
Part No.	A	B	C	D	E	F	G	H	J	L	P	R
5664420000	G 3/4	G 1/8	162	75	138	11	24	32	44	72	24	10
5674420000	G 1	G 1/8	162	75	138	11	24	32	44	72	24	10

Part No.	S	T	U	Weight kg								
5664420000	2	20	22	1.1								
5674420000	2	20	22	1								

Directional valves ▶ Pneumatically operated

Series 563, 565, 567 Accessories

Fig. 3



D560_033

Part No.	A	B	C	D	E	F	G	H	J	L	M	N
5684420000	G 1 1/2	G 1/4	162	170	146	9	35	60	70	84	90	154

Part No.	P	R	S	T	U	X	Weight kg
5684420000	27	10	2	14	22	60	3.7

Base plate, Series 563, 565

▶ Compressed air connection output: G 1/4 - G 1/2 ▶ Can be assembled into blocks



5600-341

Ambient temperature min./max.	-20 °C / +120 °C
Medium temperature min./max.	-20 °C / +120 °C
Medium	Compressed air
Working pressure min./max.	-1 bar / 30 bar
Number of valve positions	1
Surface	painted
Direction of pneumatic port (2,4)	Down
Direction of pneumatic port (12)	Down
Direction of pneumatic port (14)	Down

Materials:

Base plate	Die-cast aluminum, black painted
Seals	Acrylonitrile Butadiene Rubber

Technical Remarks

- 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, see chapter „Technical information“.

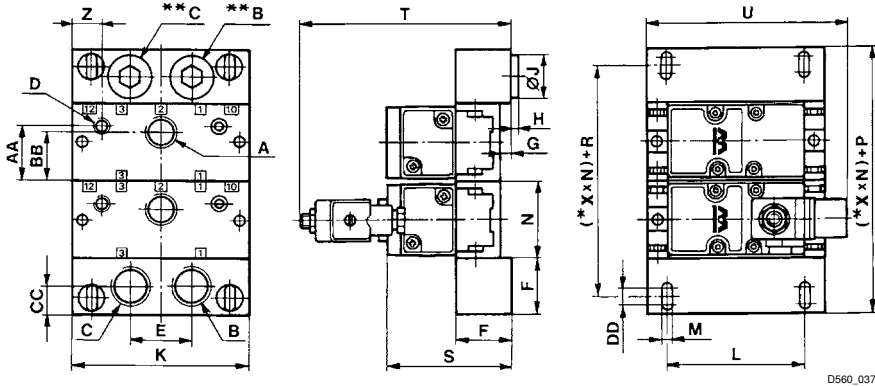
Suitable for Series	Compressed air connection				Weight [kg]	Part No.
	Input [1]	Output [2 / 4]	Exhaust [3 / 5]	Pilot connection [14]		
563	-	G 1/4	-	G 1/8	0.15	5634510000
565	G 3/4	G 3/8	G 3/4	G 1/8	0.36	5644510000
	-	G 1/2	-	-	0.33	5654510000

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

Pneumatics catalog, online PDF, as of 2016-10-31, ©AVENTICS S.à r.l., subject to change

Series 563, 565, 567 Accessories

Dimensions



* N = number of subbases

** Blanking plug

Part No.	A	B	C	D	E	F	G	H	J	K	L	M
5634510000	G 1/4	G 3/8	G 3/8	G 1/8	30	25	5	3	17	96	74	6.5
5644510000	G 3/8	G 3/4	G 3/4	G 1/8	44	40	8	4.5	27	128	100	7
5654510000	G 1/2	G 3/4	G 3/4	G 1/8	44	40	8	4.5	27	128	100	7

Part No.	N	P	R	S	T	U	Z	AA	BB	CC	DD	Weight kg
5634510000	44	50	25	68	119	114	17.5	28.5	28.5	12.5	12	0.15
5644510000	56	80	56	90	159	135	21.5	40	36	20	12	0.36
5654510000	56	80	56	90	159	135	21.5	40	36	20	12	0.33

End plate kit, Series 563, 565

▶ Can be assembled into blocks



5600-351

Ambient temperature min./max.
Medium temperature min./max.
Medium
Working pressure min./max.
Surface
Direction of pneumatic port (1)
Direction of pneumatic port (3,5)

Materials:
Housing
Seals

-20°C / +120°C
-20°C / +120°C
Compressed air
-1 bar / 30 bar
painted
Down
Down

Die-cast aluminum, black painted
Acrylonitrile Butadiene Rubber

Technical Remarks

- 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, see chapter „Technical information“.

Directional valves ▶ Pneumatically operated

Series 563, 565, 567 Accessories

Suitable for Series	Compressed air connection		Order quantity [pcs.]	Weight [kg]	Part No.
	Input [1]	Exhaust [3 / 5]			
563	G 3/8	G 3/8	2	0.34	5634800000
565	G 3/4	G 3/4	2	1	5654800000

Scope of delivery incl. seal and mounting screws

Blanking plate, for series 563-565



5600-381

Ambient temperature min./max.
Medium temperature min./max.
Medium
Working pressure min./max.
Number of valve positions
Surface

-20 °C / +120 °C
-20 °C / +120 °C
Compressed air
-1 bar / 30 bar
1
painted

Materials:
Housing
Seals

Die-cast aluminum, black painted
Acrylonitrile Butadiene Rubber

Technical Remarks

- 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, see chapter „Technical information“.

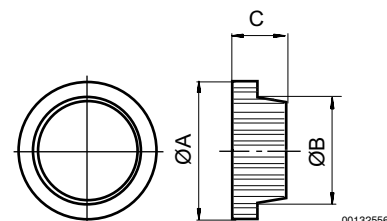
Suitable for Series	Weight [kg]	Part No.
563	0.07	5634530000
565	0.11	5654530000

Scope of delivery incl. seal and mounting screws

Separator



00128546



00132556

The delivered product varies from that in the illustration. See the drawing for an exact description.

Series 563, 565, 567 Accessories

Part No.	Port	Type	ØA	ØB	C	Ambient temperature min./max.
5634810000	G 1/4	563	14.6	12	6	-20 / 120
5654810000	G 1/2	565	22.9	18.9	8	-20 / 120

Part No.	Material	Material Seal	Weight [kg]						
5634810000	Brass	Acrylonitrile Butadiene Rubber	0.004						
5654810000	Brass	Acrylonitrile Butadiene Rubber	0.045						

Silencers, Series SI1 ▶ Sintered bronze



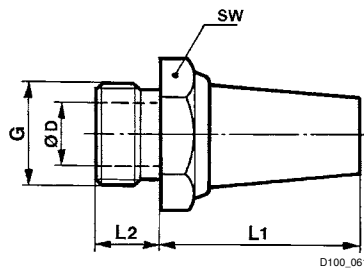
P100_060

Working pressure min./max. 0 bar / 10 bar
 Ambient temperature min./max. -25°C / +80°C
 Medium Compressed air

Materials:
 Silencers Sintered bronze
 Thread Brass

Compressed air connection	Sound pressure level	Qn	Order quantity	Weight	Part No.
	[dB]	[l/min]	[piece]	[kg]	
G 1/4	79	2900	10	0.02	1827000001
G 3/8	84	5900	5	0.05	1827000002
G 1/2	90	7100	2	0.08	1827000003
G 1/4	-	-	10	0.013	R412004817

Dimensions



D100_061

Directional valves ► Pneumatically operated

Series 563, 565, 567 Accessories

Part No.	Port G	SW	Ø D	L1	L2							
1827000001	G 1/4	17	8.5	25	8							
1827000002	G 3/8	22	12	34	10							
1827000003	G 1/2	27	14.5	44	12							
R412004817	G 1/4	16	8.5	18.7	7.6							

Sound pressure level measured at 6 bar at 1 m distance

Silencers, Series SI1 ► Sintered bronze



P100_037

Working pressure min./max.
Ambient temperature min./max.
Medium

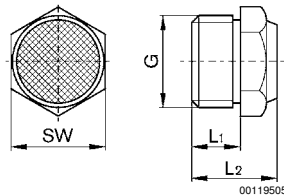
0 bar / 10 bar
-25°C / +80°C
Compressed air

Materials:
Silencers
Thread

Sintered bronze
Brass

Compressed air connection	Sound pressure level	Qn	Order quantity	Weight	Part No.
	[dB]	[l/min]	[piece]	[kg]	
G 1/4	88	900	10	0.01	1827000033
G 3/8	90	1750	5	0.016	1827000034
G 1/2	85	2000	2	0.035	1827000035

Dimensions



00119505

Part No.	Port G	L1	L2	SW								
1827000033	G 1/4	8	13.5	17								
1827000034	G 3/8	10	17.5	22								
1827000035	G 1/2	12	19.5	27								

Sound pressure level measured at 6 bar at 1 m distance

AVENTICS GmbH
Ulmer Straße 4
30880 Laatzen, GERMANY
Phone +49 511 2136-0
Fax +49 511 2136-269
www.aventics.com
info@aventics.com



Find more contact information at
www.aventics.com/contact

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 judgment and verification. It must be remembered that the products are subject to a natural process of wear and aging.

31-10-2016

An example configuration is depicted on the title page. The delivered product may thus vary from that in the illustration. Subject to change. © AVENTICS S.à r.l.
This document, as well as the data, specifications and other information set forth in it, are the exclusive property of AVENTICS S.à r.l.. It may not be reproduced or given to third parties without its consent. PDF online