

# 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
<b>Accessories</b>		
	Single subbase, for series 563-565 ▶ thread connections on the bottom ▶ Compressed air connection output: G 1/4 - G 1/2	6
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## 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

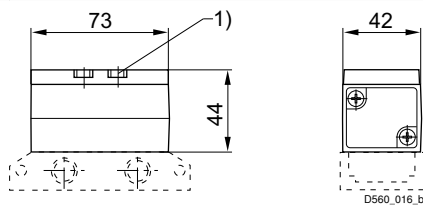
#### Technical Remarks

- 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	4 / 10	-20 °C / +70 °C	-20 °C / +70 °C	0.3	-	<b>5632010000</b>
				-1 / 30	6 / 10	-20 °C / +70 °C	-20 °C / +70 °C		-	<b>5632310000</b>
				-1 / 10	4 / 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

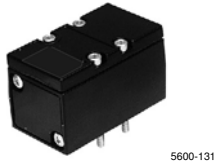


1) Tightening torque for mounting screws: 2.7 ± 0.3 Nm  
Base plate not included in the scope of delivery

## Directional valves ▶ Pneumatically operated

### 3/2-directional valve, Series 565

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



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/m <sup>3</sup> - 5 mg/m <sup>3</sup>

#### Materials:

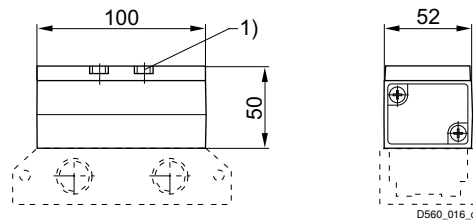
Housing	Aluminum
Seals	Acrylonitrile butadiene styrene

#### 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	4 / 10	-20 °C / +70 °C	-20 °C / +70 °C	0.55	-	<b>5652010000</b>
				-1 / 30	6 / 10	-20 °C / +70 °C	-20 °C / +70 °C		-	<b>5652310000</b>
				-1 / 10	4 / 10	-20 °C / +120 °C	-20 °C / +120 °C		1)	<b>5652510000</b>
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



### 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

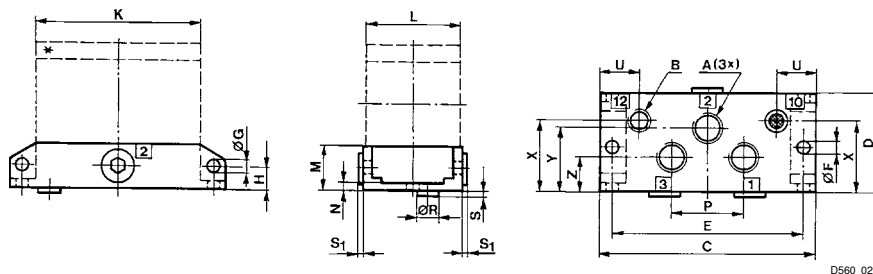
Die-cast aluminum, black painted

#### 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	<b>R402003177</b>
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	<b>5654410000</b>

#### Dimensions



D560\_027

Part No.	A	B	C	D	E	F	G	H	K	L	M	N
<b>R402003177</b>	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
<b>5654410000</b>	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
<b>R402003177</b>	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

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## 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			
<b>5654410000</b>	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.	See table below
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

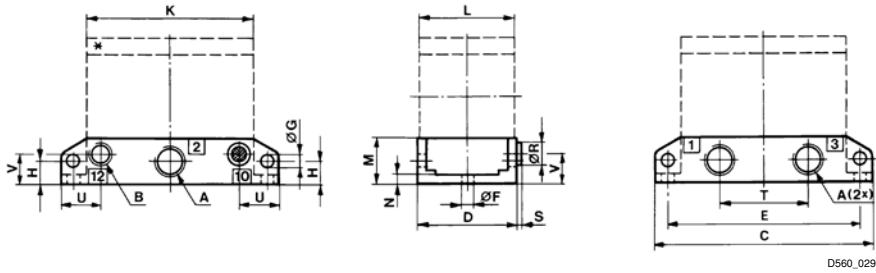
#### Technical Remarks

- 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				Working pressure min./max.	Weight	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	-1 / 30	0.13	Fig. 1	<b>5634420000</b>
565	G 3/8	G 3/8	G 3/8	G 1/8	-1 / 30	0.37	Fig. 1	<b>5644420000</b>
	G 1/2	G 1/2	G 1/2	G 1/8		0.32		<b>5654420000</b>
567	G 3/4	G 3/4	G 3/4	G 1/8	-1 / 30	1.1	Fig. 2	<b>5664420000</b>
	G 1	G 1	G 1	G 1/8	-1 / 42	1		<b>5674420000</b>
2x 567	G 1 1/2	G 1 1/2	G 1 1/2	G 1/4	-1 / 30	3.7	Fig. 3	<b>5684420000</b>

**Series 563, 565, 567**  
Accessories

Fig. 1

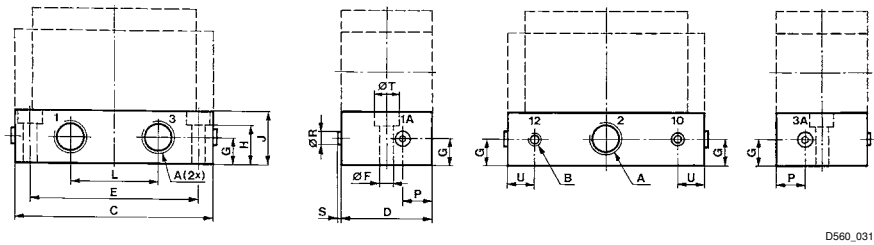


Part No.	A	B	C	D	E	F	G	H	K	L	M	N
<b>5634420000</b>	G 1/4	G 1/8	96	44	85	5.3	5.1	10	73	42	20	4
<b>5644420000</b>	G 3/8	G 1/8	128	56	114	6.5	6.1	17	100	52	32	6
<b>5654420000</b>	G 1/2	G 1/8	128	56	114	6.5	6.1	17	100	52	32	6

Part No.	R	S	T	U	V	Weight kg
<b>5634420000</b>	10	2	39	17.5	13	0.13
<b>5644420000</b>	10	2	56	21.5	23.5	0.37
<b>5654420000</b>	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
<b>5664420000</b>	G 3/4	G 1/8	162	75	138	11	24	32	44	72	24	10
<b>5674420000</b>	G 1	G 1/8	162	75	138	11	24	32	44	72	24	10

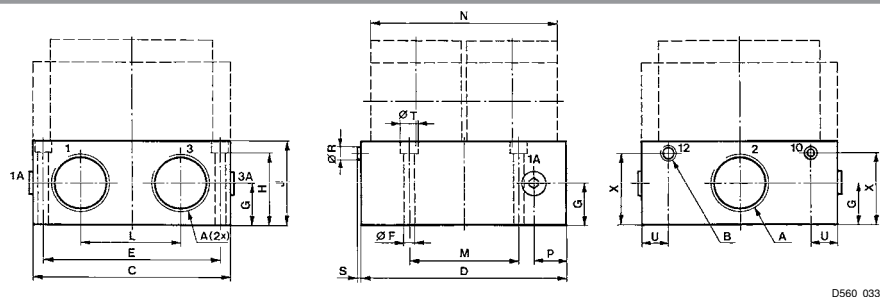
Part No.	S	T	U	Weight kg
<b>5664420000</b>	2	20	22	1.1
<b>5674420000</b>	2	20	22	1



## 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
<b>5684420000</b>	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				
<b>5684420000</b>	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“.

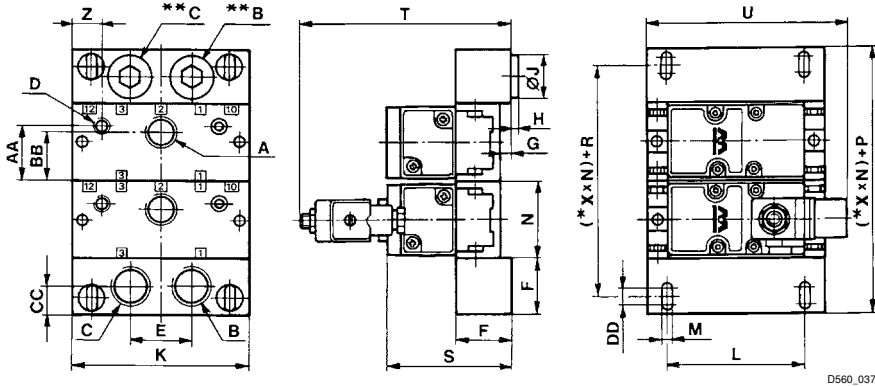
Suitable for Series	Compressed air connection				Weight [kg]	Part No.
	Input [1]	Output [2 / 4]	Exhaust [3 / 5]	Pilot connection [14]		
563	-	G 1/4	-	G 1/8	0.15	5634510000
565	G 3/4	G 3/8	G 3/4	G 1/8	0.36	5644510000
	-	G 1/2	-	-	0.33	5654510000

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

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### 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.

-20°C / +120°C

Medium temperature min./max.

-20°C / +120°C

Medium

Compressed air

Working pressure min./max.

-1 bar / 30 bar

Surface

painted

Direction of pneumatic port (1)

Down

Direction of pneumatic port (3,5)

Down

Materials:

Housing

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“.

## 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“.

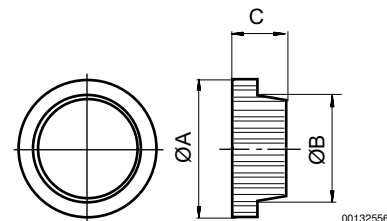
Suitable for Series	Weight [kg]	Part No.
563	0.07	5634530000
565	0.11	5654530000

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.  
Ambient temperature min./max.  
Medium

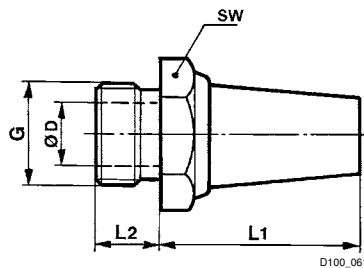
0 bar / 10 bar  
-25°C / +80°C  
Compressed air

Materials:  
Silencers  
Thread

Sintered bronze  
Brass

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

### 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

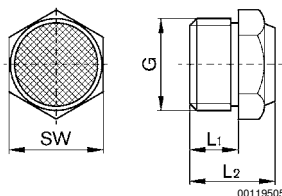
0 bar / 10 bar  
-25°C / +80°C  
Compressed air

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	<b>1827000033</b>
G 3/8	90	1750	5	0.016	<b>1827000034</b>
G 1/2	85	2000	2	0.035	<b>1827000035</b>

### 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

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24-11-2016

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.  
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