AVENTICS

Directional valves ► Pneumatically operated

Series CD12

Brochure



Series CD12



3/2-directional valve, Series CD12
► Qn = 4000 l/min ► pipe connection ► compressed air connection output: G 1/2
► suitable for ATEX — 3



3/2-directional valve, Series CD12
► Qn = 4000 l/min ► pipe connection ► compressed air connection output: M22x1,5
► suitable for ATEX — 5



5/2-directional valve, Series CD12
► Qn = 4100 l/min ► pipe connection ► compressed air connection output: G 1/2
► suitable for ATEX — 7



5/2-directional valve, Series CD12
► Qn = 4100 l/min ► pipe connection ► compressed air connection output: M22x1,5
► suitable for ATEX — 10



5/3-directional valve, Series CD12
► Qn = 3600 - 4100 l/min ► pipe connection ► compressed air connection output: G 1/2
► suitable for ATEX — 13

Accessories



Silencers, Series SI1
► Sintered bronze — 15



Silencers, Series SI1
► Polyethylene — 15



Silencers, Series SI1
► Sintered bronze — 16



Silencers, Series SI1
► Sintered bronze — 17

3/2-directional valve, Series CD12

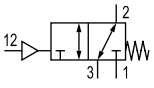
► Qn = 4000 l/min ► pipe connection ► compressed air connection output: G 1/2 ► suitable for ATEX



00134160

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Working pressure min./max.	-0.95 bar / 16 bar
Control pressure min./max.	2 bar / 10 bar
Ambient temperature min./max.	-25 °C / +70 °C
Medium temperature min./max.	-25 °C / +70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Materials:	
Housing	Aluminum; Polyamide, fiber-glass reinforced
Seals	Acrylonitrile Butadiene Rubber; Polyurethane

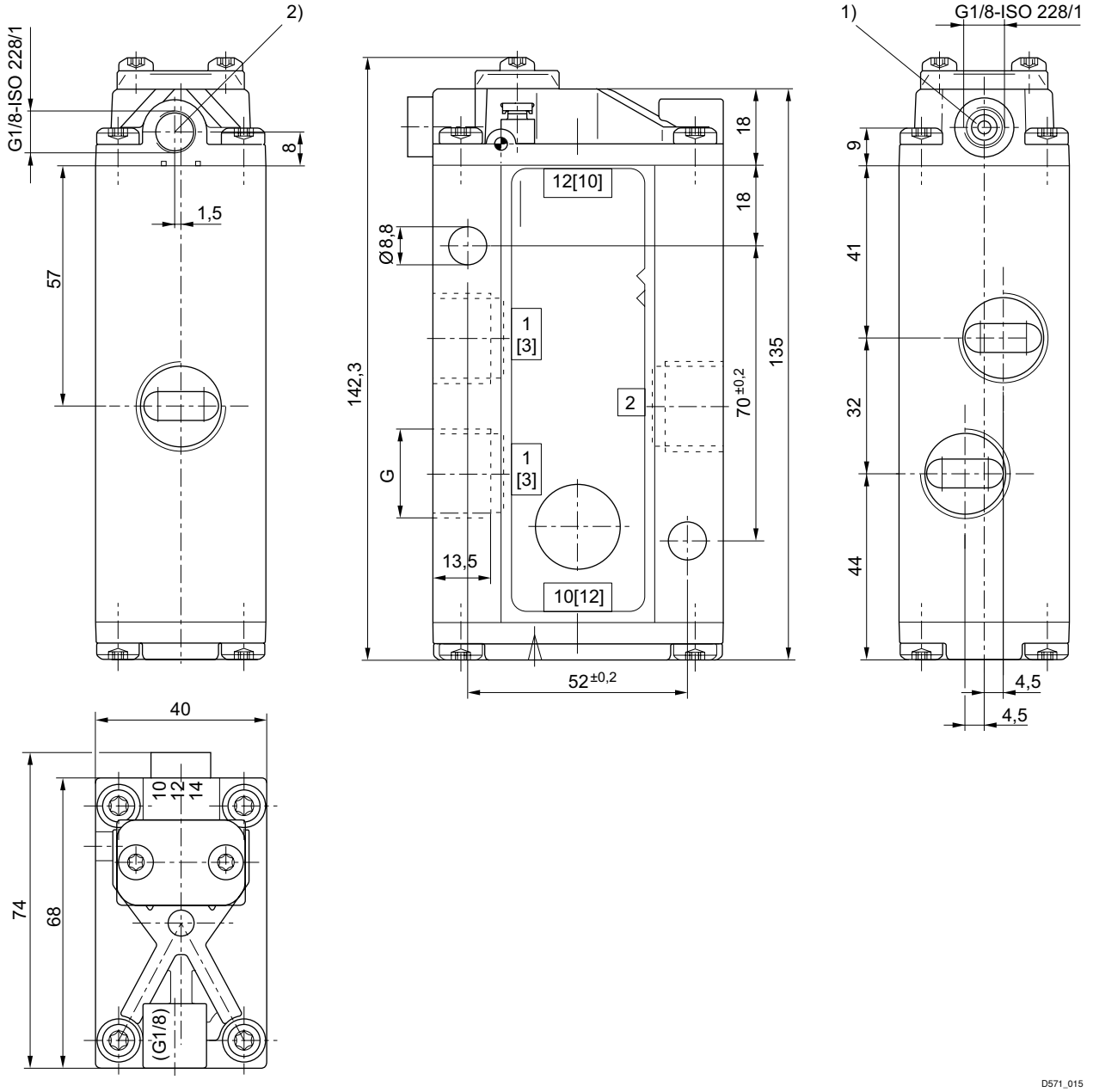
Technical Remarks
■ The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
■ The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
■ The oil content of compressed air must remain constant during the life cycle.
■ Use only the approved oils from AVENTICS, see chapter „Technical information“.

		Compressed air connection				Flow rate value	Weight	Part No.
		Input	Output	Exhaust	Pilot control exhaust			
						[l/min]	[kg]	
	NO/NC	G 1/2	G 1/2	G 1/2	G 1/8	4000	0.71	**5711100300**
Nominal flow Qn at 6 bar and Δp = 1 bar								

3/2-directional valve, Series CD12

► Qn = 4000 l/min ► pipe connection ► compressed air connection output: G 1/2 ► suitable for ATEX

Dimensions



1) Port 12/10
2) vent port of piston

3/2-directional valve, Series CD12

► Qn = 4000 l/min ► pipe connection ► compressed air connection output: M22x1,5 ► suitable for ATEX

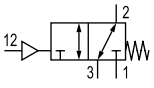


00134160

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Working pressure min./max.	-0.95 bar / 16 bar
Control pressure min./max.	2 bar / 10 bar
Ambient temperature min./max.	-25 °C / +70 °C
Medium temperature min./max.	-25 °C / +70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Materials:	
Housing	Aluminum; Polyamide, fiber-glass reinforced
Seals	Acrylonitrile Butadiene Rubber; Polyurethane

Technical Remarks

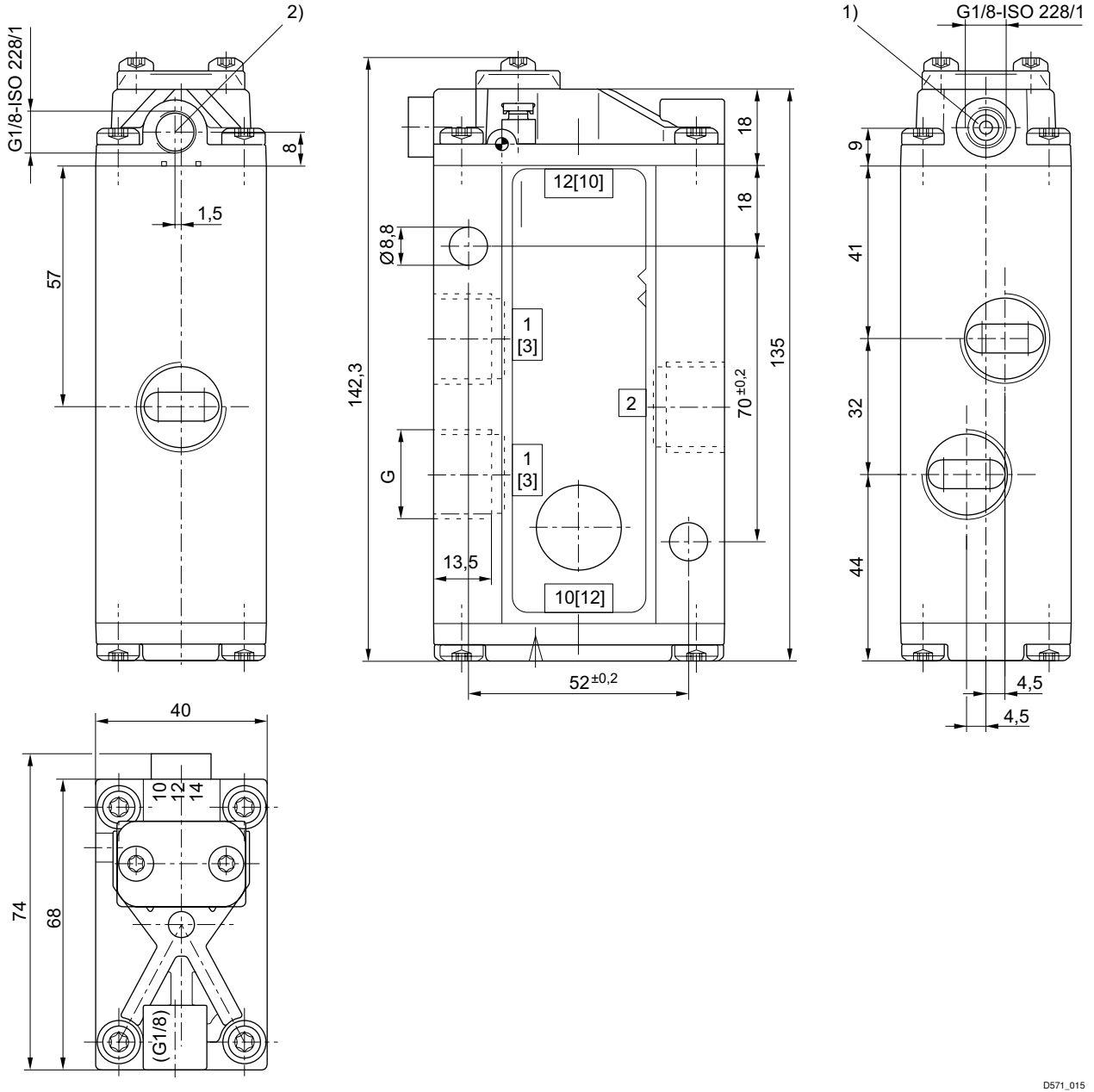
- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.

		Compressed air connection				Flow rate value	Weight	Part No.
		Input	Output	Exhaust	Pilot control exhaust			
						[l/min]	[kg]	
	NO/NC	M22x1,5	M22x1,5	M22x1,5	G 1/8	4000	0.71	**5711100200**
Nominal flow Qn at 6 bar and Δp = 1 bar								

3/2-directional valve, Series CD12

► Qn = 4000 l/min ► pipe connection ► compressed air connection output: M22x1,5 ► suitable for ATEX

Dimensions



1) Port 12/10
2) vent port of piston

5/2-directional valve, Series CD12

► Qn = 4100 l/min ► pipe connection ► compressed air connection output: G 1/2 ► suitable for ATEX

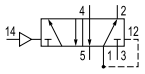
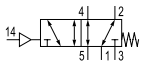
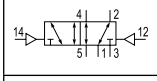


00134161

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Working pressure min./max.	-0.95 bar / 16 bar
Control pressure min./max.	2 bar / 10 bar
Ambient temperature min./max.	See table below
Medium temperature min./max.	See table below
Medium	Compressed air
Max. particle size	50 μm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Materials:	
Housing	Aluminum; Polyamide, fiber-glass reinforced
Seals	Acrylonitrile Butadiene Rubber; Polyurethane

Technical Remarks

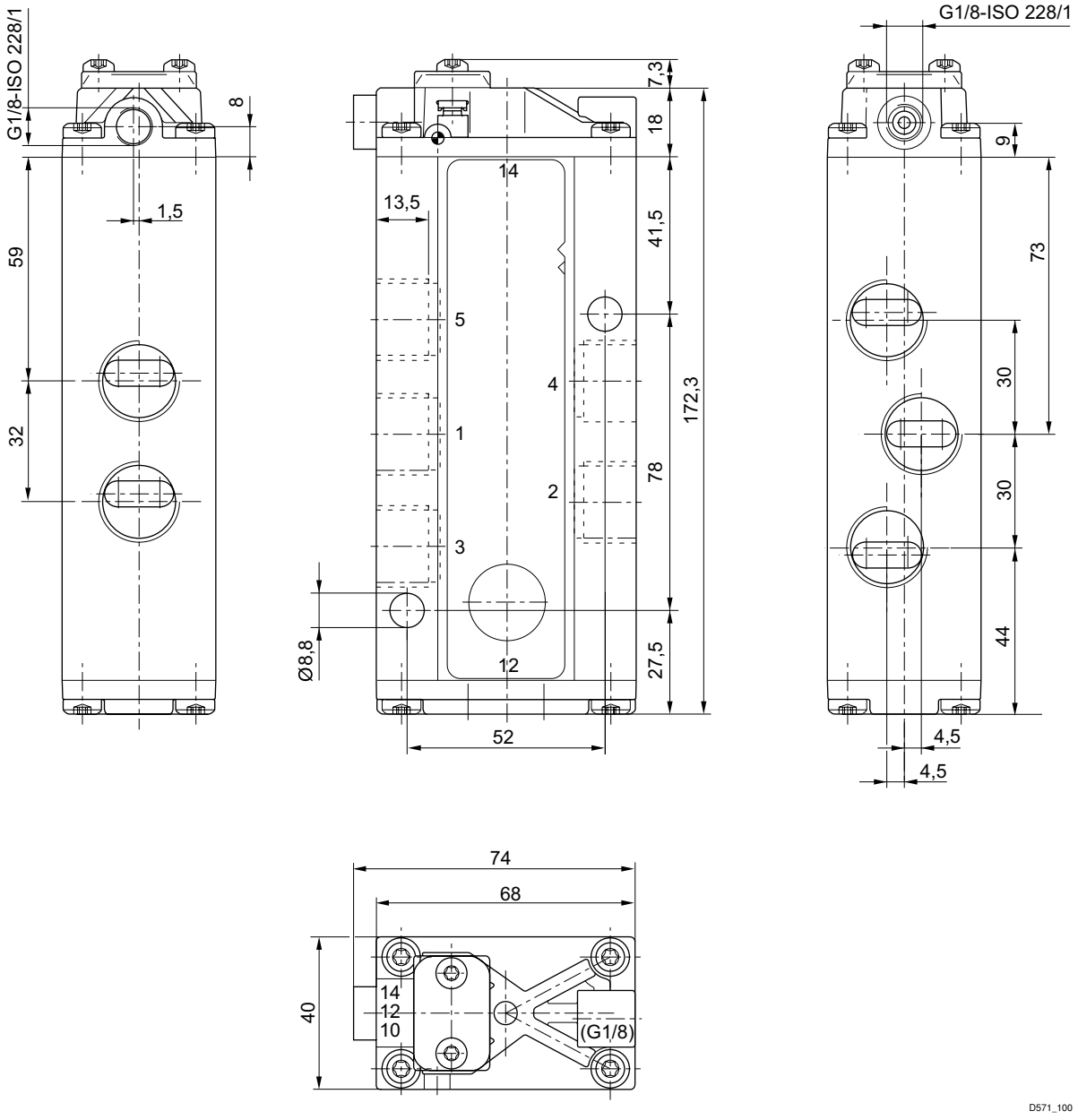
- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.

	Compressed air connection				Flow rate value		Ambient temperature min./max.	Medium temperature min./max.		Fig.	Part No.
	Input	Output	Exhaust	Pilot control exhaust		1►2					
						[l/min]	[°C]	[°C]	[kg]		
	G 1/2	G 1/2	G 1/2	G 1/8	4100	-	-25°C / +70°C	-25°C / +70°C	0.86	Fig. 2	**5711000100**
	G 1/2	G 1/2	G 1/2	G 1/8	4100	-	-15°C / +70°C	-15°C / +70°C	0.86	Fig. 1	**5711000300**
	G 1/2	G 1/2	G 1/2	G 1/8	4100	4100	-25°C / +70°C	-25°C / +70°C	0.86	Fig. 2	**5711001100**
Nominal flow Qn at 6 bar and Δp = 1 bar											

5/2-directional valve, Series CD12

► Qn = 4100 l/min ► pipe connection ► compressed air connection output: G 1/2 ► suitable for ATEX

Fig. 1, Single air pilot

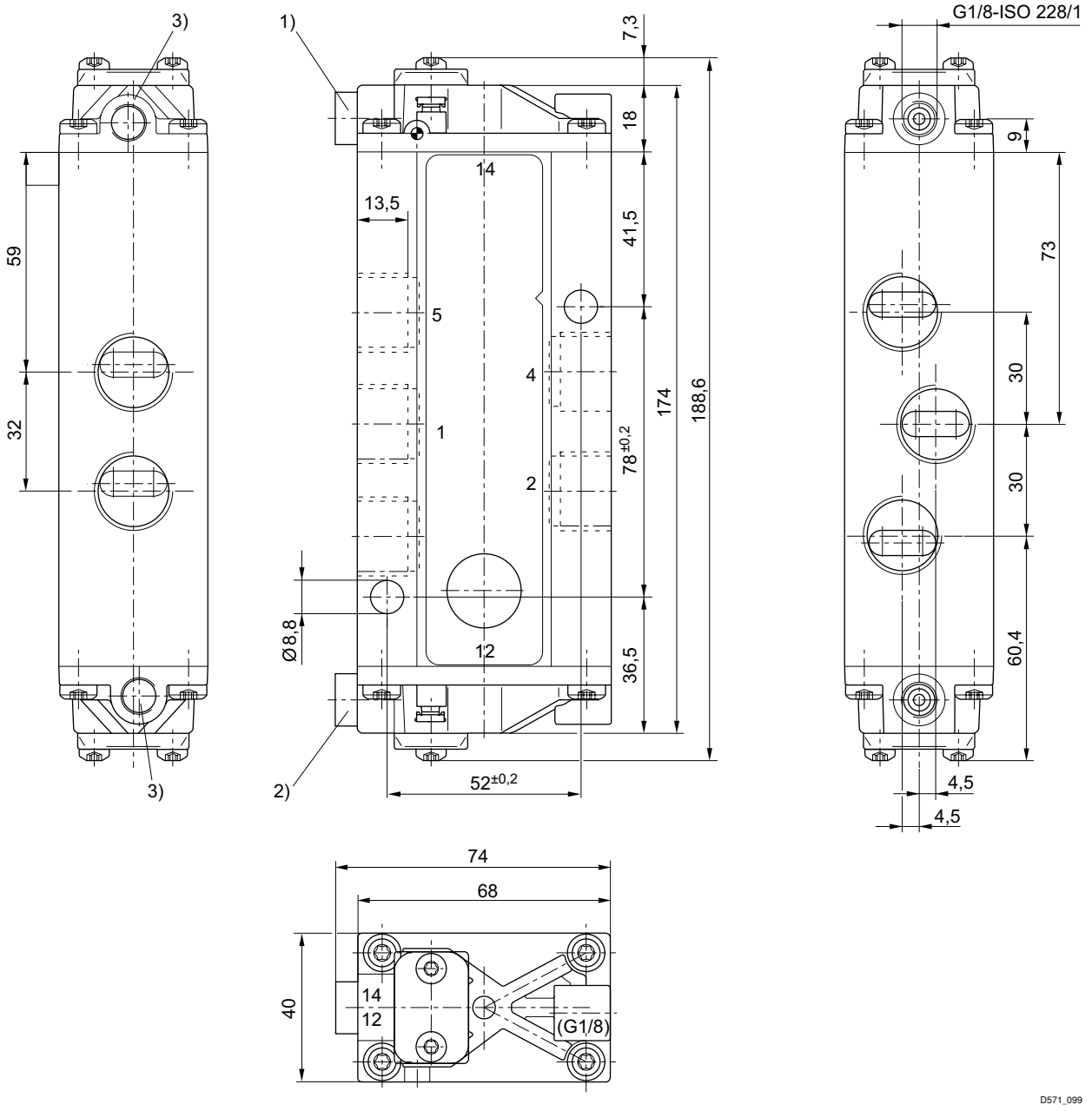


1) Port 14
2) Vent port of piston

5/2-directional valve, Series CD12

► Qn = 4100 l/min ► pipe connection ► compressed air connection output: G 1/2 ► suitable for ATEX

Fig. 2, double air pilot



1) Port 14
2) Port 12
3) Port without function

5/2-directional valve, Series CD12

► Qn = 4100 l/min ► pipe connection ► compressed air connection output: M22x1,5 ► suitable for ATEX

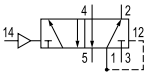
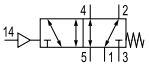
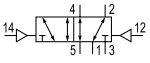


00134161

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Working pressure min./max.	-0.95 bar / 16 bar
Control pressure min./max.	2 bar / 10 bar
Ambient temperature min./max.	See table below
Medium temperature min./max.	See table below
Medium	Compressed air
Max. particle size	50 μm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Materials:	
Housing	Aluminum; Polyamide, fiber-glass reinforced
Seals	Acrylonitrile Butadiene Rubber; Polyurethane

Technical Remarks

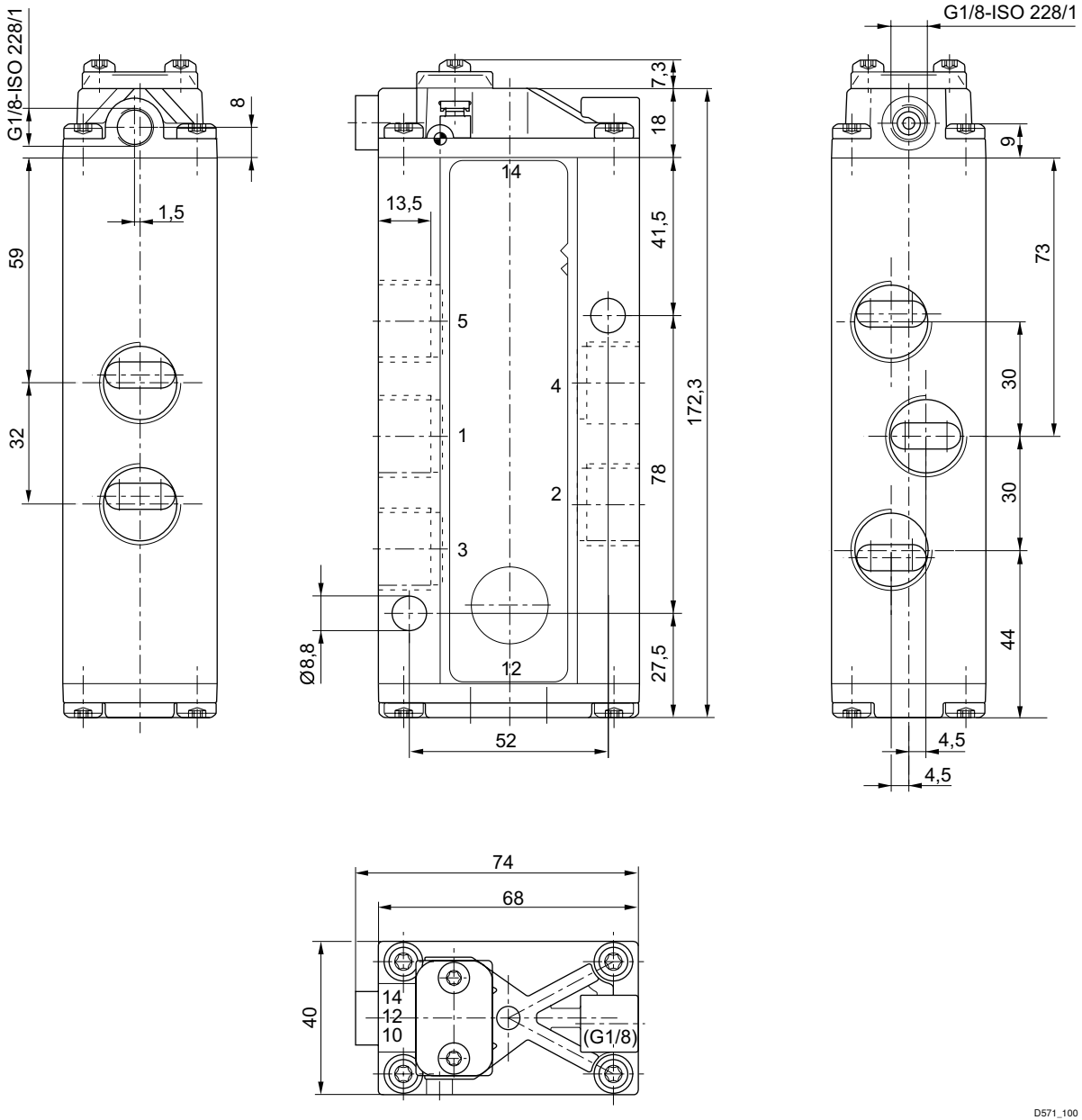
- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.

	Compressed air connection				Flow rate value	Ambient temperature min./max.	Medium temperature min./max.	Weight	Fig.	Part No.
	Input	Output	Exhaust	Pilot control exhaust						
					[l/min]	[°C]	[°C]	[kg]		
	M22x1,5	M22x1,5	M22x1,5	G 1/8	4100	-25°C / +70°C	-25°C / +70°C	0.86	Fig. 2	**5711000000**
	M22x1,5	M22x1,5	M22x1,5	G 1/8	4100	-15°C / +70°C	-15°C / +70°C	0.86	Fig. 1	R412013343
	M22x1,5	M22x1,5	M22x1,5	G 1/8	4100	-25°C / +70°C	-25°C / +70°C	0.86	Fig. 2	R412013344
Nominal flow Qn at 6 bar and Δp = 1 bar										

5/2-directional valve, Series CD12

► Qn = 4100 l/min ► pipe connection ► compressed air connection output: M22x1,5 ► suitable for ATEX

Fig. 1, Single air pilot

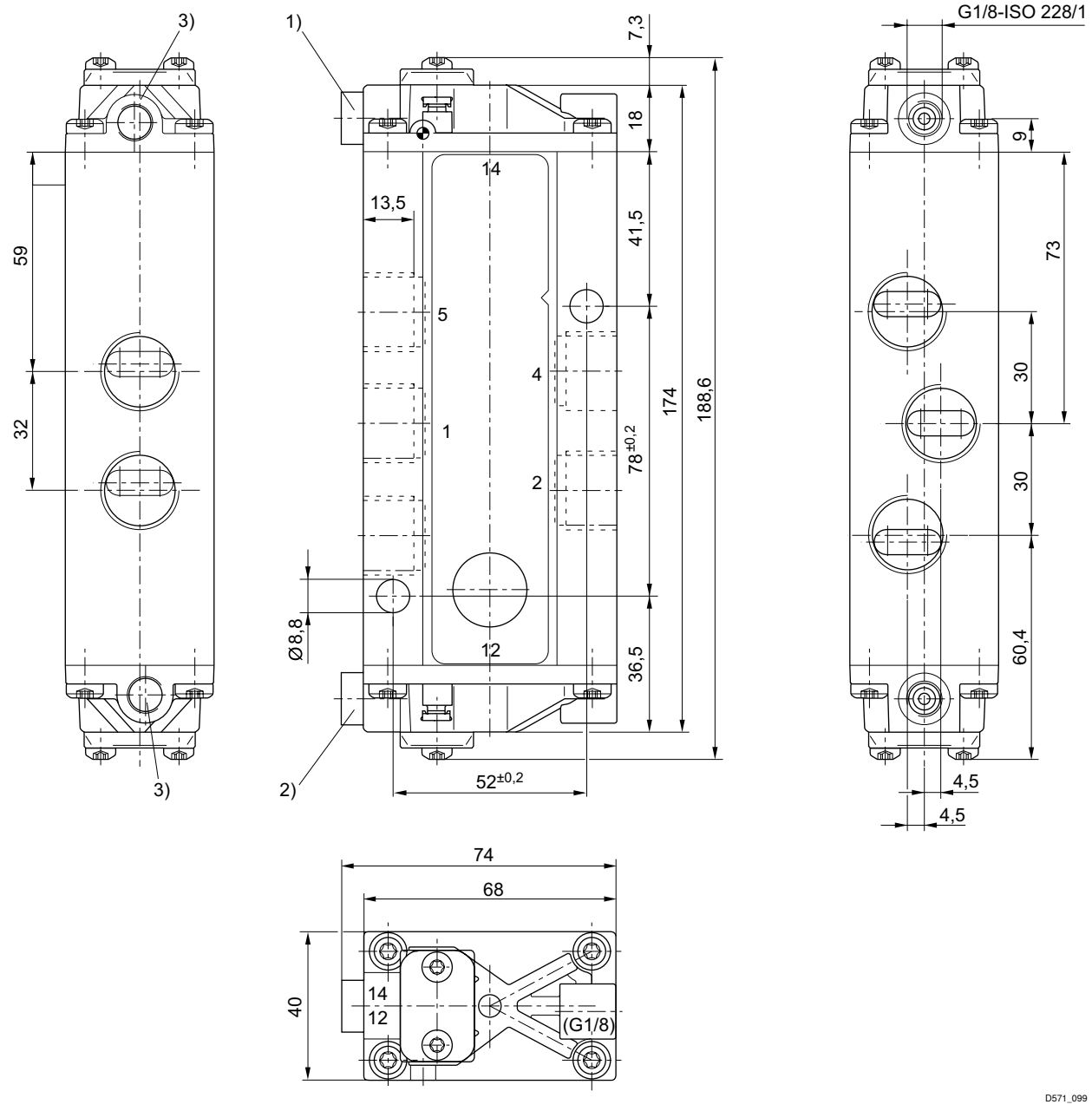


1) Port 14
2) Vent port of piston

5/2-directional valve, Series CD12

► Qn = 4100 l/min ► pipe connection ► compressed air connection output: M22x1,5 ► suitable for ATEX

Fig. 2, double air pilot



1) Port 14
2) Port 12
3) Port without function

5/3-directional valve, Series CD12

► Qn = 3600 - 4100 l/min ► pipe connection ► compressed air connection output: G 1/2 ► suitable for ATEX

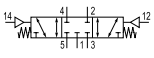
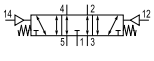
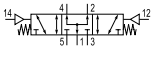


00134162

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Working pressure min./max.	-0.95 bar / 16 bar
Control pressure min./max.	3 bar / 10 bar
Ambient temperature min./max.	-25 °C / +70 °C
Medium temperature min./max.	-25 °C / +70 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Compressed air connection	according to ISO 228-1
Materials:	
Housing	Aluminum; Polyamide, fiber-glass reinforced
Seals	Acrylonitrile Butadiene Rubber; Polyurethane

Technical Remarks

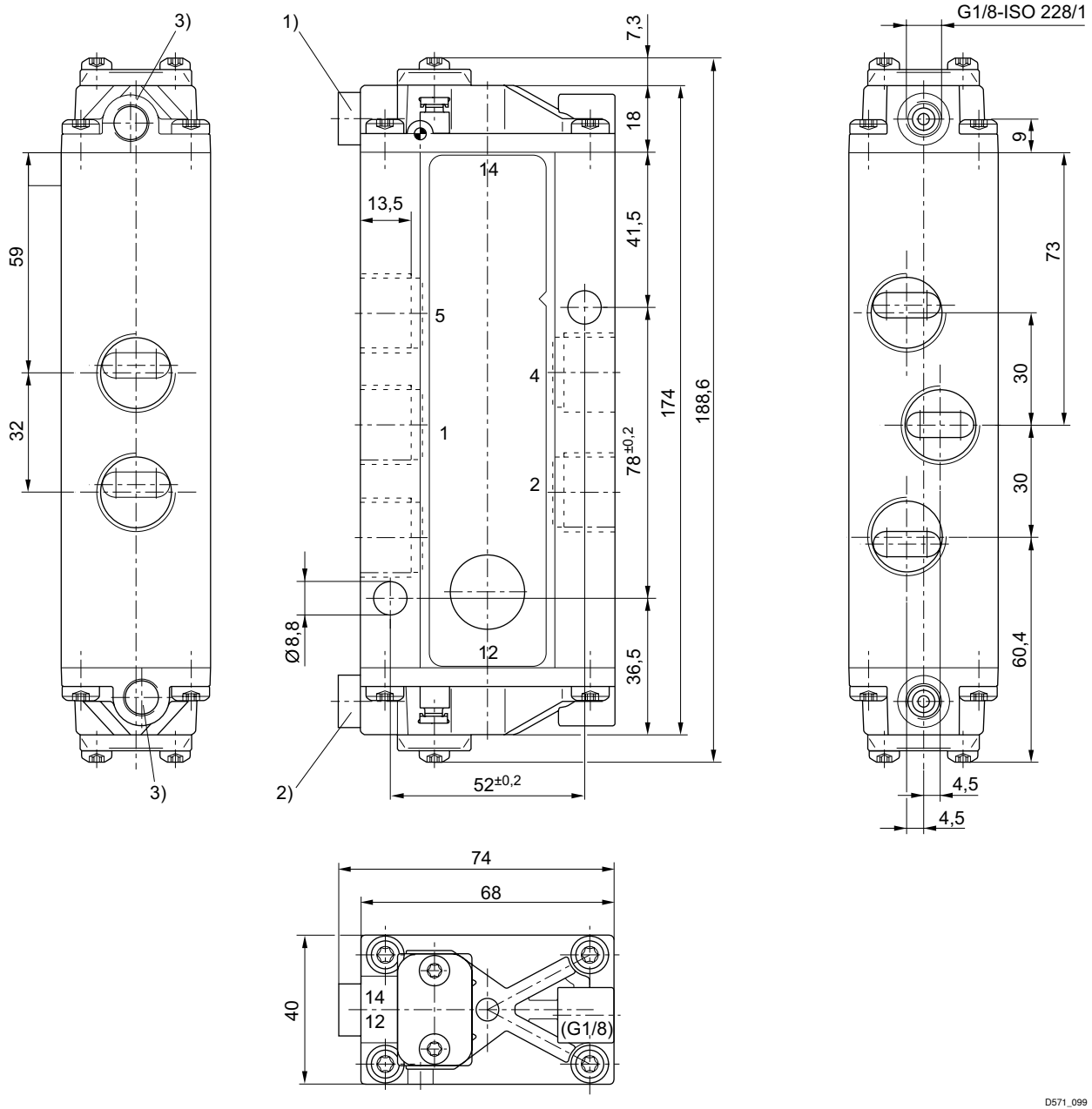
- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.

	Compressed air connection				Flow rate value		Weight	Part No.
	Input	Output	Exhaust	Pilot control exhaust	1►2	2►3		
						[l/min]	[kg]	
	G 1/2	G 1/2	G 1/2	G 1/8	3800	3800	0.95	**5711200050**
	G 1/2	G 1/2	G 1/2	G 1/8	3600	4100	0.95	**5711200060**
	G 1/2	G 1/2	G 1/2	G 1/8	4100	3800	0.95	R414002380
Nominal flow Qn at 6 bar and Δp = 1 bar								

5/3-directional valve, Series CD12

► Qn = 3600 - 4100 l/min ► pipe connection ► compressed air connection output: G 1/2 ► suitable for ATEX

Dimensions



1) Port 14
2) Port 12
3) Port without function

Series CD12
Accessories

Silencers, Series SI1
► Sintered bronze

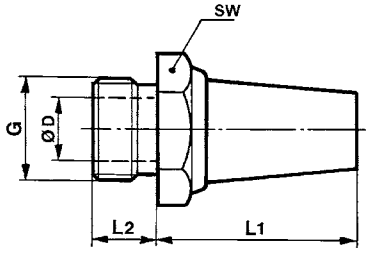


P100_060

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 1/2	90	7100	2	0.08	**1827000003**

Dimensions



D100_061

Part No.	Port G	SW	Ø D	L1	L2							
1827000003	G 1/2	27	14.5	44	12							
Sound pressure level measured at 6 bar at 1 m distance												

Silencers, Series SI1
► Polyethylene



P100_064

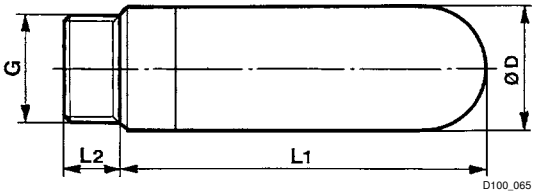
Working pressure min./max.	0 bar / 10 bar
Ambient temperature min./max.	-25 °C / +80 °C
Medium	Compressed air
Materials:	
Silencers	Polyethylene
Thread	Polyethylene

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

Series CD12
Accessories

Compressed air connection	Sound pressure level	Qn	Order quantity	Weight	Part No.
	[dB]	[l/min]	[piece]	[kg]	
G 1/2	88	7000	1	0.013	**1827000022**

Dimensions



Part No.	Port G	Ø D	L1	L2								
1827000022	G 1/2	23.3	66.5	11								
Sound pressure level measured at 6 bar at 1 m distance												

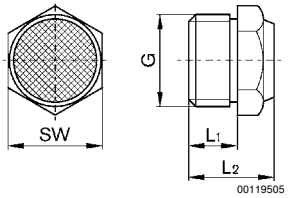
Silencers, Series SI1
► Sintered bronze


P100_037

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 1/2	85	2000	2	0.035	**1827000035**

Dimensions



Part No.	Port G	L1	L2	SW								
1827000035	G 1/2	12	19.5	27								
Sound pressure level measured at 6 bar at 1 m distance												

Series CD12
Accessories

Silencers, Series SI1
► Sintered bronze

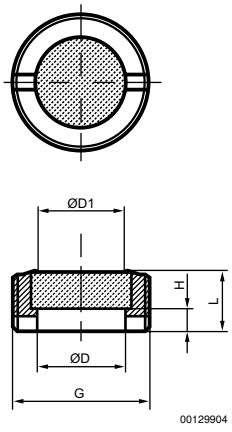


00128791

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	Order quantity [piece]	Part No.
G 1/2	2	**R412007876**

Dimensions



00129904

Part No.	Port G	Ø D	Ø D1	H	L							
R412007876	G 1/2	15	12	5	9							

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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.

26-07-2016

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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