

Series CD07

Rexroth Pneumatics

Brochure





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Directional valves ► Pneumatically operated **Series CD07**

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2/2-directional valve, Series CD07

► Qn = 1400 l/min ► pipe connection ► compressed air connection output: M14x1,5 ► suitable for ATEX



Version Spool valve, zero overlap Sealing principle Soft sealing

Working pressure min./max. -0.95 bar / 10 bar
Control pressure 2.5 bar / 10 bar
min./max.

Ambient temperature min./max. $-25\,^{\circ}$ C / $+80\,^{\circ}$ C Medium temperature min./max. $-25\,^{\circ}$ C / $+80\,^{\circ}$ C Medium Compressed air Max. particle size 50 μ m

Oil content of compressed air 0 mg/m³ - 1 mg/m³

Materials:

Housing Die cast zinc

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".

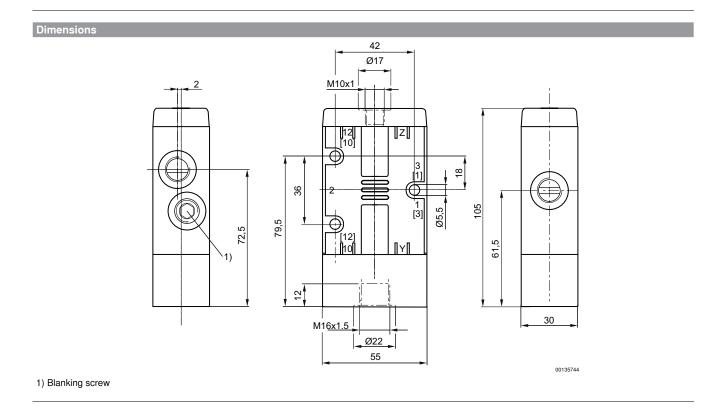
			Compress	ed air connection	Flow rate value		
		Input	Output	Pilot connection	Qn 1▶2	Weight	Part No.
					[l/min]	[kg]	
12 NAC 10	NO	M14x1,5	M14x1,5	M10x1, M16x1	1400	0.4	5710409000

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar

Nominal flow Qn (1►2) can be throttled up to 100 l/min.



► Qn = 1400 l/min ► pipe connection ► compressed air connection output: M14x1,5 ► suitable for ATEX





3/2-directional valve, Series CD07

► Qn = 1400 l/min ► pipe connection ► compressed air connection output: G 1/4 ► suitable for ATEX



Version Spool valve, zero overlap Sealing principle Soft sealing Working pressure min./max. -0.95 bar / 10 bar

Control pressure Mini./max. See table below min./max.

 $\begin{array}{lll} \mbox{Ambient temperature min./max.} & -25\,^{\circ}\mbox{C} \ / \ +80\,^{\circ}\mbox{C} \\ \mbox{Medium temperature min./max.} & -25\,^{\circ}\mbox{C} \ / \ +80\,^{\circ}\mbox{C} \\ \mbox{Medium} & \mbox{Compressed air} \\ \mbox{Max. particle size} & \mbox{50}\ \mu\mbox{m} \\ \end{array}$

Oil content of compressed air 0 mg/m³ - 1 mg/m³ Compressed air connection according to ISO 228-1

Materials:

Housing Die cast zinc

Seals Acrylonitrile Butadiene Rubber

Technical Remarks

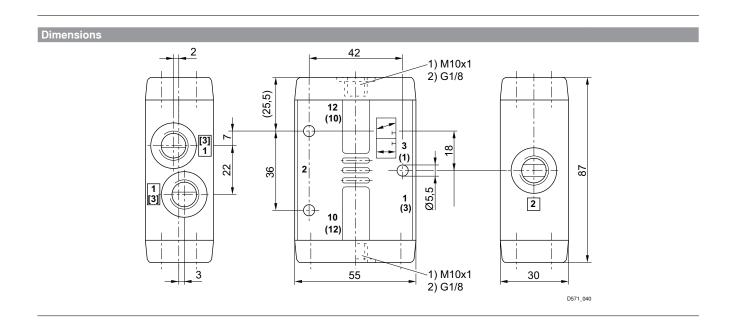
■ The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

- 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".
- option valve: The input and output compressed air connections can be exchanged. The valve can thereby be used in the NC or NO operating mode.

		Compressed air connection				Flow rate value			
		Input	Output	Exhaust	Pilot con- nection	Qn	Control pressure min./max.	Weight	Part No.
						[l/min]	[bar]	[kg]	
12 J J W	NO/NC	G 1/4	G 1/4	G 1/4	G 1/8	1400	3 / 10	0.4	5710400100
12 10	NO/NC	G 1/4	G 1/4	G 1/4	G 1/8	1400	2/10	0.4	5710401100
Nominal flow Qn at 6	bar and $\Delta p = 1$	bar							



► Qn = 1400 l/min ► pipe connection ► compressed air connection output: G 1/4 ► suitable for ATEX



3/2-directional valve, Series CD07

► Qn = 1400 l/min ► pipe connection ► compressed air connection output: M14x1,5 ► suitable for ATEX



Version Spool valve, zero overlap
Sealing principle Soft sealing
Working pressure min./max. -0.95 bar / 10 bar
Control pressure See table below
min./max.

Ambient temperature min./max. See table below Medium temperature min./max. See table below Medium Compressed air Max. particle size 50 μ m

Oil content of compressed air 0 mg/m³ - 1 mg/m³

Materials:

Housing Die cast zinc

Seals Acrylonitrile Butadiene Rubber

Technical Remarks

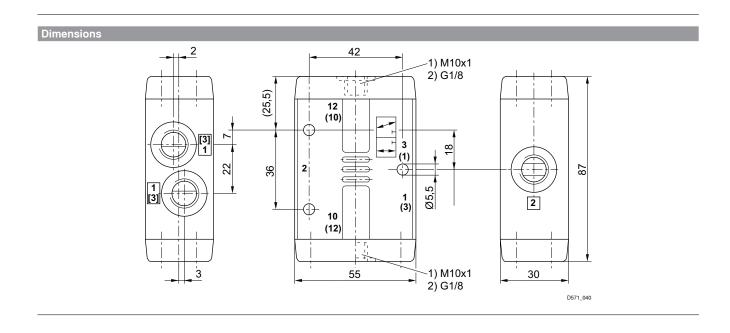
- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter "Technical information".
- option valve: The input and output compressed air connections can be exchanged. The valve can thereby be used in the NC or NO operating mode.

		Compressed air connection				Flow rate value				
		Input	Output	Ex- haust	Pilot con- nection	Qn		Ambient temperature min./	Medium tem- perature min./ max.	Part No.
						[l/min]	[bar]	[°C]	[°C]	
12 T T W	NO/NC	M14x1,5	M14x1,5	M14x1,5	M10x1	1400	3 / 10 4 / 10	-25°C/+80°C -35°C/+80°C	-25°C / +80°C -35°C / +80°C	5710400000 5710400090
12 10	NO/NC	M14x1,5	M14x1,5	M14x1,5	M10x1	1400	2/10	-25°C/+80°C	-25°C/+80°C	5710401000

Part No.	Weight
	[kg]
5710400000	0.4
5710400090	0.4
5710401000	0.4
Nominal flow Qn	n at 6 bar and $\Delta p = 1$ bar



► Qn = 1400 l/min ► pipe connection ► compressed air connection output: M14x1,5 ► suitable for ATEX





5/2-directional valve, Series CD07

► Qn = 1200 l/min ► pipe connection ► compressed air connection output: G 1/4 ► suitable for ATEX



 Version
 Spool valve, zero overlap

 Sealing principle
 Soft sealing

 Mounting on manifold strip
 P-strip, PRS strip

Working pressure min./max.

-0.95 bar / 10 bar
Control pressure
See table below
min./max.

Ambient temperature min./max. $-25\,^{\circ}$ C / $+80\,^{\circ}$ C Medium temperature min./max. $-25\,^{\circ}$ C / $+80\,^{\circ}$ C Medium Compressed air Max. particle size 50 μ m

Oil content of compressed air 0 mg/m³ - 1 mg/m³ Compressed air connection according to ISO 228-1

Materials:

Housing Die cast zinc

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".

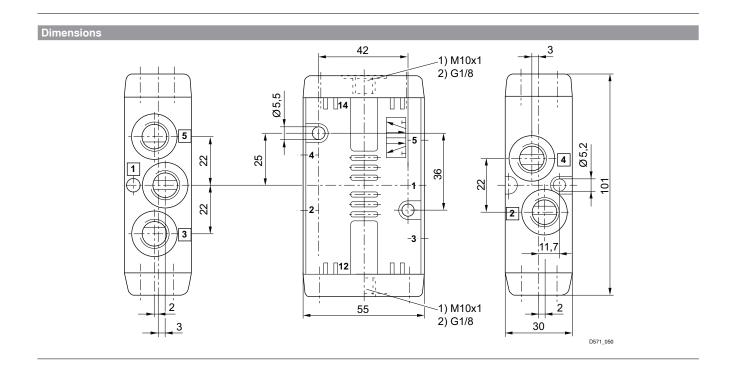
			Compressed	air connection	Flow rate value			
	Input	Output	Exhaust	Pilot connec- tion		Control pressure min./max.	Weight	Part No.
					[l/min]	[bar]	[kg]	
14 J ² WW	G 1/4	G 1/4	G 1/4	G 1/8	1200	3 / 10	0.5	5710500100
14 12 12	G 1/4	G 1/4	G 1/4	G 1/8	1200	2/10	0.5	5710501100

¹⁾ Protected against dust

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar



► Qn = 1200 l/min ► pipe connection ► compressed air connection output: G 1/4 ► suitable for ATEX





5/2-directional valve, Series CD07

► Qn = 1200 I/min ► pipe connection ► compressed air connection output: M14x1,5 ► suitable for ATEX



VersionSpool valve, zero overlapSealing principleSoft sealingMounting on manifold stripP-strip, PRS stripWorking pressure min./max.-0.95 bar / 10 bar

Control pressure See table below min./max.

Ambient temperature min./max. -25°C / +80°C

Medium temperature min./max. -25 ° C / +80 ° C

Medium

Compressed air

Max. particle size

50 µm

Oil content of compressed air 0 mg/m³ - 1 mg/m³

Materials:

Housing Die cast zinc

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".

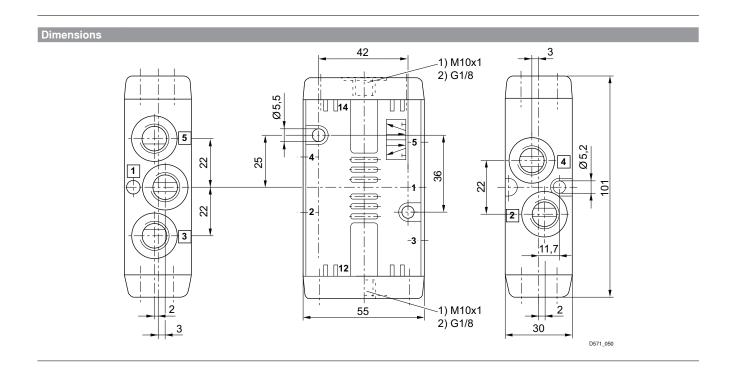
		Co	ompressed a	air connection	Flow rate value				
	Input	Output	Exhaust	Pilot con- nection		Control pressure min./max.		Note	Part No.
					[l/min]	[bar]	[kg]		
14 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	M14x1,5	M14x1,5	M14x1,5	M10x1	1200	3 / 10	0.5	1)	5710500000 5710509300
14 12 12 12	M14x1,5	M14x1,5	M14x1,5	M10x1	1200	2/10	0.5	-	5710501000

1) Protected against dust

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar



► Qn = 1200 l/min ► pipe connection ► compressed air connection output: M14x1,5 ► suitable for ATEX





5/2-directional valve, Series CD07

► cold-resistant ► Qn = 1200 l/min ► pipe connection ► compressed air connection output: G 1/4 ► suitable for ATEX



Version Spool valve, zero overlap Sealing principle Soft sealing

Mounting on manifold strip P-strip, PRS strip
Working pressure min./max. -0.95 bar / 10 bar
Control pressure
min./max. See table below

Oil content of compressed air $0 \ mg/m^3 - 1 \ mg/m^3$ Compressed air connection according to ISO 228-1

Materials:

Housing Die cast zinc

Seals Acrylonitrile Butadiene Rubber; Polyurethane

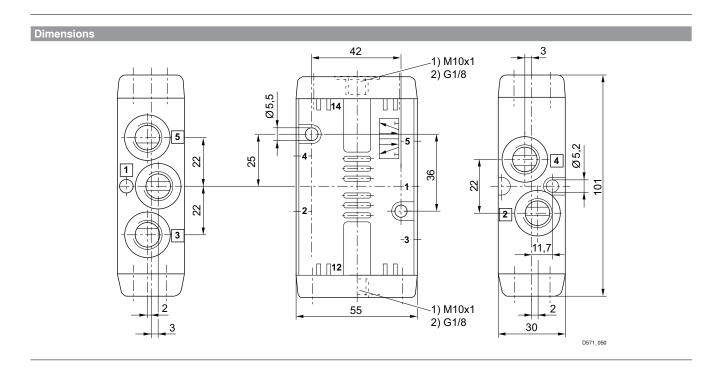
Technical Remarks

- 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			
	Input	Output	Exhaust	Pilot connec- tion	Qn	Control pres- sure min./max.		Part No.
					[l/min]	[bar]	[kg]	
14 J 2 W 5 1 1 3	G 1/4	G 1/4	G 1/4	G 1/8	1200	3.5 / 10	0.5	5710500190
14 12 113 113	G 1/4	G 1/4	G 1/4	G 1/8	1200	3 / 10	0.5	5710501190
Nominal flow Qn at 6 b	ar and Δp = 1 ba	r		•				



► cold-resistant ► Qn = 1200 l/min ► pipe connection ► compressed air connection output: G 1/4 ► suitable for ATEX



5/3-directional valve, Series CD07

► Qn = 880 - 1070 I/min ► pipe connection ► compressed air connection output: G 1/4 ► suitable for ATEX



Version Spool valve, zero overlap Sealing principle Soft sealing P-strip, PRS strip Mounting on manifold strip -0.95 bar / 10 bar Working pressure min./max. Control pressure 3 bar / 10 bar min./max.

Ambient temperature min./max. -25°C/+80°C Medium temperature min./max. -25°C/+80°C Medium Compressed air Max. particle size $50 \mu m$

Oil content of compressed air 0 mg/m³ - 1 mg/m³ Compressed air connection according to ISO 228-1

Materials:

Housing Die cast zinc; Polyamide, fiber-glass reinforced

Acrylonitrile Butadiene Rubber Seals

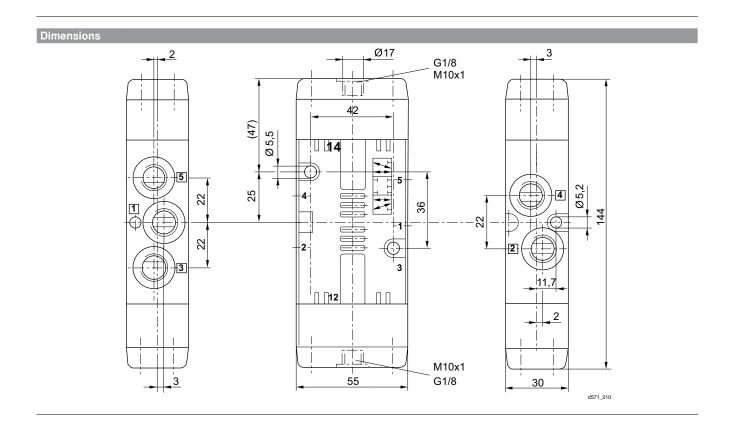
Technical Remarks

- 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".

		C	compressed	air connection		Flow	rate value		
	Input	Output	Exhaust	Pilot connection	Qn	Qn 1▶2	Qn 2▶3	Weight	Part No.
							[l/min]	[kg]	
14 2 12 12 12 12 12 12 12 12 12 12 12 12 1	G 1/4	G 1/4	G 1/4	G 1/8	900	960	-	1.15	5710502100
14 J 12 J 12 12	G 1/4	G 1/4	G 1/4	G 1/8	900	1030	880	1.15	5710502110
14 12 12 12 14 12 14 14 14 14 14 14 14 14 14 14 14 14 14	G 1/4	G 1/4	G 1/4	G 1/8	900	1070	950	1.15	5710502120
Nominal flow Qn at 6	bar and Δp = 1	bar							



► Qn = 880 - 1070 I/min ► pipe connection ► compressed air connection output: G 1/4 ► suitable for ATEX





5/3-directional valve, Series CD07

► Qn = 900 - 960 I/min ► pipe connection ► compressed air connection output: M14x1,5 ► suitable for ATEX



Version Spool valve, zero overlap
Sealing principle Soft sealing
Mounting on manifold strip P-strip, PRS strip
Working pressure min./max. -0.95 bar / 10 bar
Control pressure 3 bar / 10 bar

 $\begin{array}{lll} \mbox{Ambient temperature min./max.} & -25\,^{\circ}\mbox{C} \ / \ +80\,^{\circ}\mbox{C} \\ \mbox{Medium temperature min./max.} & -25\,^{\circ}\mbox{C} \ / \ +80\,^{\circ}\mbox{C} \\ \mbox{Medium} & \mbox{Compressed air} \\ \mbox{Max. particle size} & \mbox{50}\ \mu\mbox{m} \\ \end{array}$

Oil content of compressed air $0 \text{ mg/m}^3 - 1 \text{ mg/m}^3$ Compressed air connection according to ISO 228-1

Materials:

min./max.

Housing Die cast zinc; Polyamide, fiber-glass reinforced

Seals Acrylonitrile Butadiene Rubber

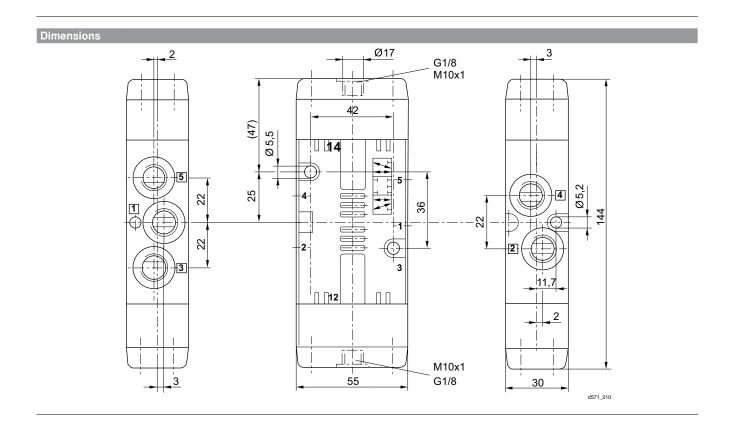
Technical Remarks

- 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".

		Flo	w rate value						
	Input	Output	Exhaust	Pilot connec- tion	Qn 1▶2	Qn 2▶3	Weight	Part No.	
						[l/min]	[kg]		
14	M14x1,5	M14x1,5	M14x1,5	M10x1	960	900	1.15	R412008118	
Nominal flow Qn at 6 ba	Nominal flow Qn at 6 bar and $\Delta p = 1$ bar								



► Qn = 900 - 960 I/min ► pipe connection ► compressed air connection output: M14x1,5 ► suitable for ATEX





Series CD07 Accessories

P-manifold

► for series CD07, 5/2 and 5/3-directional valves



Ambient temperature min./max.

-25 ° C / +80 ° C

Medium temperature min./max.

-25 ° C / +80 ° C

Medium

Compressed air

Working pressure min./max.

-0.95 bar / 16 bar

Exhaust (3,5)

uncollected exhaust

Compressed air connection

according to ISO 228-1

Materials:

Base plate Aluminum; Polyoxymethylene Seals Acrylonitrile Butadiene Rubber

Mounting bracket Steel

Technical Remarks

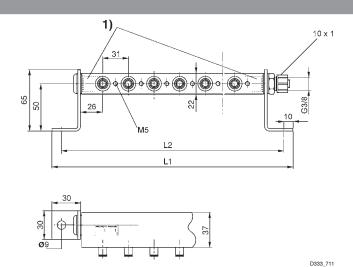
- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.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

Compressed air connection	Number of valve positions	Weight	Part No.
Input			
[1]		[kg]	
	2	0.277	3337120222
	3	0.338	3337120232
	4	0.401	3337120242
	5	0.462	3337120252
	6	0.52	3337120262
Ø 10x1	7	0.595	3337120272
	8	0.64	3337120282
	9	0.705	3337120292
	10	0.773	3337120302
	11	0.82	3337120312
	12	0.914	3337120322



Series CD07 Accessories

Dimensions



1) Only use fittings with max. length of thread engagement equal to 12 mm.

Part No.	L1	L2	Weight kg					
3337120222	152	132	0.277					
3337120232	183	163	0.338					
3337120242	214	194	0.401					
3337120252	245	225	0.462					
3337120262	276	256	0.52					
3337120272	307	287	0.595					
3337120282	338	318	0.64					
3337120292	369	349	0.705					
3337120302	400	380	0.773					
3337120312	431	411	0.82					
3337120322	462	442	0.914					

R, P, S subbase, Series CD07



Ambient temperature min./max. Medium temperature min./max.

Medium

Working pressure min./max.

Exhaust (3,5)

Compressed air connection

Materials:

Base plate Seals

-25°C/+80°C -25°C/+80°C Compressed air

-0.95 bar / 16 bar

With directional exhaust (3/5)

Ports separated according to ISO 228-1

Aluminum; Polyoxymethylene Acrylonitrile Butadiene Rubber

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



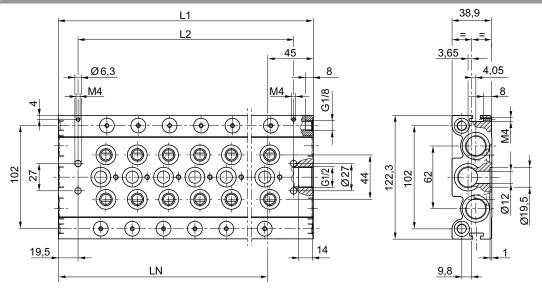
Series CD07 Accessories

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".

	Com	pressed air connection	Number of valve positions	,	Part No.
Input	Exhaust	Pilot connection			
[1]	[3 / 5]	[14]		[kg]	
			4	1.446	8985072042
			6	1.94	8985072062
G 1/2	G 1/2	G 1/8	8	2.422	8985072082
			10	2.943	8985072102
			12	3.401	8985072122

Dimensions



00138184

Part No.	L1	L2	LN	Weight kg				
8985072042	183	144	138	1.446				
8985072062	245	206	200	1.94				
8985072082	307	268	262	2.422				
8985072102	369	330	324	2.943				





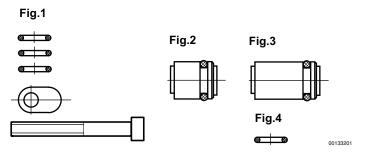
Series CD07 Accessories

Part No.	L1	L2	LN	Weight kg				
8985072122	431	392	386	3.401				

Accessories, Series CD07



16412



Part No.	Туре	Weight [kg]	Delivery quantity [Piece]	Fig.			
3354600002	Mounting kit for 10 valves, delivery includes: 30 seals, 10 washers, and 10 mounting screws.		1	Fig. 1			
3354600082	P plug	0.022	1	Fig. 2			
3354600072	R/S plug	0.023	1	Fig. 3			

Blanking plate, for series CD07



Ambient temperature min./max. -25° C / +80 $^{\circ}$ C Medium temperature min./max. -25° C / +80 $^{\circ}$ C Medium Compressed air Working pressure min./max. -0.95 bar / 16 bar Number of valve positions 1

Materials:

Base plate Aluminum

Seals Acrylonitrile Butadiene Rubber

16413

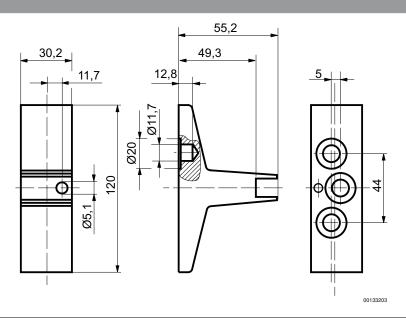
Weight	Part No.
[kg]	
0.181	3354601024

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



Series CD07 Accessories

Dimensions



Silencers, Series SI1

► Sintered bronze



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

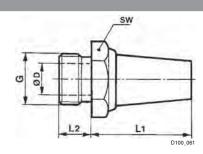
P100_060

Part No.	Weight	Delivery quantity	Qn		Compressed air connection
	[kg]	[Piece(s)]	[l/min]	[dB]	
1827000001	0.02	10	2900	79	G 1/4
R412004817	0.013	10	_	-	G 1/4



Series CD07 Accessories

Dimensions



Part No.	Port G	SW	ØD	L1	L2						
1827000001	G 1/4	17	8.5	25	8						
R412004817	G 1/4	16	8.5	18.7	7.6						1

Sound pressure level measured at 6 bar at 1 m distance

Silencers, Series SI1

► Sintered bronze



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

Materials:

Sintered bronze Silencers Thread Brass

00128791

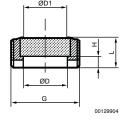
Compressed air connection	Delivery quantity	Part No.
	[Piece(s)]	
G 1/4	10	R414000155



Series CD07 Accessories

Dimensions





Part No.	Port G	ØD	Ø D1	Н	L				
R414000155	G 1/4	8	6	3	6				

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

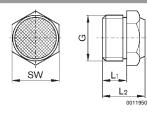
Materials:

Silencers Sintered bronze

Thread Brass

Part No.	Weight	Delivery quantity			Compressed air connection
	[kg]	[Piece(s)]	[l/min]	[dB]	
1827000033	0.01	10	900	88	G 1/4

Dimensions







Series CD07 Accessories

Part No.	Port G	L1	L2	SW								
1827000033	G 1/4	8	13.5	17								
Sound pressure level measured at 6 bar at 1 m distance												

Silencers, Series SI1

► Polyethylene



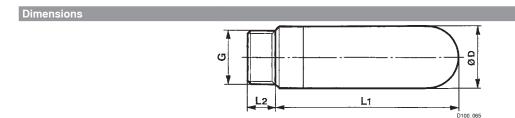
P100_064

 $\begin{tabular}{lll} Working pressure min./max. & 0 bar / 10 bar \\ Ambient temperature min./max. & -25 °C / +80 °C \\ Medium & Compressed air \\ \end{tabular}$

Materials: Silencers

Silencers Polyethylene Thread Polyethylene

Compressed air connection			Delivery quantity	Weight	Part No.
	[dB]	[l/min]	[Piece(s)]	[kg]	
G 1/4	80	3100	5	0.003	1827000020



Part No.	Port G	ØD	L1	L2							
1827000020	G 1/4	15.5	34.5	8							
Sound pressure level measured at 6 bar at 1 m distance											

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



AVENTICS GmbH Ulmer Straße 4 30880 Laatzen 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

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The data specified only serve to describe the product.

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27-12-2015

