

Directional valves ▶ Electrically operated

5/3-directional valve, Series CD12

▶ Qn = 3600 - 4100 l/min ▶ Pilot valve width: 30 mm ▶ pipe connection ▶ compressed air connection output: G 1/2 ▶ Electr. connection: Plug, EN 175301-803, form A ▶ Manual override: with detent, without detent ▶ double solenoid



00134159

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
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	50 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Compressed air connection	according to ISO 228-1 with directional pilot air exhaust
Connector standard	EN 175301-803:2006
Degree of protection	With connection See table below
Compatibility index	See table below
Duty cycle	100 %
Weight	See table below
Materials:	
Housing	Aluminum; Polyamide, fiber-glass reinforced
Seals	Acrylonitrile Butadiene Rubber; Polyurethane

Technical Remarks

- 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“.
- ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

Operating voltage			Voltage tolerance			Power consumption	Switch-on power		Holding power	
DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz
						W	VA	VA	VA	VA
24 V	-	-	-10% / +10%	-	-	2.1	-	-	-	-
-	110 V	110 V	-	-20% / +10%	-10% / +20%	-	6.8	5.7	4.3	3.3
-	230 V	230 V	-	-20% / +10%	-10% / +20%	-	6.9	6.2	4.4	3.5

	MO	Compressed air connection					Operating voltage			Holding power	Part No.
		Input	Output	Exhaust	Pilot connection	Pilot control exhaust	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz	
										[VA]	
		G 1/2	G 1/2	G 1/2	-	M5	24 V	-	-	-	5725650220
						-	24 V	-	-	-	5725650920
						M5	-	110 V	110 V	4.3	5725655270
						M5	-	230 V	230 V	4.4	5725655280
						-	230 V	230 V	4.4	5725655980	
	-	G 1/2	G 1/2	G 1/2	-	-	-	-	-	5725655202	

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		Input	Output	Exhaust	Pilot connection	Pilot control exhaust	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz	
										[VA]	
		G 1/2	G 1/2	G 1/2	-	M5	-	-	-	-	R412008098
		G 1/2	G 1/2	G 1/2	G 1/8	M5	24 V	-	-	-	R412000127
							-	110 V	110 V	4.3	R412000148
							-	230 V	230 V	4.4	R412000149
	-	G 1/2	G 1/2	G 1/2	G 1/8	-	-	-	-	-	R412000151
		G 1/2	G 1/2	G 1/2	-	M5	24 V	-	-	-	R412000224
							-	110 V	110 V	4.3	R412000225
							-	230 V	230 V	4.4	R412000230
	-	G 1/2	G 1/2	G 1/2	-	-	-	-	-	-	R412000237
		G 1/2	G 1/2	G 1/2	G 1/8	M5	24 V	-	-	-	5725680220
							-	110 V	110 V	4.3	5725685270
							-	230 V	230 V	4.4	5725685280
	-	G 1/2	G 1/2	G 1/2	G 1/8	-	-	-	-	-	5725685202
		G 1/2	G 1/2	G 1/2	-	M5	24 V	-	-	-	R412000219
							-	110 V	110 V	4.3	R412000220
							-	230 V	230 V	4.4	R412000221
	-	G 1/2	G 1/2	G 1/2	-	-	-	-	-	-	R412000222
		G 1/2	G 1/2	G 1/2	G 1/8	M5	24 V	-	-	-	R412000153
							-	110 V	110 V	4.3	R412000154
							-	230 V	230 V	4.4	R412000157
	-	G 1/2	G 1/2	G 1/2	G 1/8	-	-	-	-	-	R412000160

Part No.	Holding power	Switch-on power		Power consumption	Flow rate value			Working pressure min./max.	Control pressure min./max.	Ambient temperature min./max.
		AC 50 Hz	AC 60 Hz		24 V DC	Qn	Qn 1▶2			
	[VA]	[VA]	[VA]	[W]	[l/min]			[bar]	[bar]	[°C]
5725650220	-	-	-	2.1						
5725650920	-	-	-	2.1						
5725655270	3.3	6.8	5.7	-	3800	3800	3800	3 / 10	3 / 10	-15°C / +50°C
5725655280	3.5	6.9	6.2	-						
5725655980	3.5	6.9	6.2	-						
5725655202	-	-	-	-	3800	3800	3800	3 / 16	3 / 16	-15°C / +70°C
R412008098	-	-	-	-	3800	3800	3800	3 / 10	3 / 10	-15°C / +50°C

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Part No.	Holding power	Switch-on power	Switch-on power	Power consumption	Flow rate value			Working pressure min./max.	Control pressure min./max.	Ambient temperature min./max.
	AC 60 Hz	AC 50 Hz	AC 60 Hz	24 V DC	Qn	Qn 1▶2	Qn 2▶3			
	[VA]	[VA]	[VA]	[W]	[l/min]					
R412000127	-	-	-	2.1						
R412000148	3.3	6.8	5.7	-	3800	3800	3800	-0.95 / 16	3 / 10	-15°C / +50°C
R412000149	3.5	6.9	6.2	-						
R412000151	-	-	-	-	3800	3800	3800	-0.95 / 16	3 / 16	-15°C / +70°C
R412000224	-	-	-	2.1						
R412000225	3.3	6.8	5.7	-	-	3600	4100	3 / 10	3 / 10	-15°C / +50°C
R412000230	3.5	6.9	6.2	-						
R412000237	-	-	-	-	-	3600	4100	3 / 16	3 / 16	-15°C / +70°C
5725680220	-	-	-	2.1						
5725685270	3.3	6.8	5.7	-	-	3600	4100	-0.95 / 16	3 / 10	-15°C / +50°C
5725685280	3.5	6.9	6.2	-						
5725685202	-	-	-	-	-	3600	4100	-0.95 / 16	3 / 16	-15°C / +70°C
R412000219	-	-	-	2.1						
R412000220	3.3	6.8	5.7	-	-	4100	3800	3 / 10	3 / 10	-15°C / +50°C
R412000221	3.5	6.9	6.2	-						
R412000222	-	-	-	-	-	4100	3800	3 / 16	3 / 16	-15°C / +70°C
R412000153	-	-	-	2.1						
R412000154	3.3	6.8	5.7	-	-	4100	3800	-0.95 / 16	3 / 10	-15°C / +50°C
R412000157	3.5	6.9	6.2	-						
R412000160	-	-	-	-	-	4100	3800	-0.95 / 16	3 / 16	-15°C / +70°C

Part No.	Medium temperature min./max.	Switch-on time	Switch-off time	Compatibility index	Protection class	Weight	Note
		t_F	t_E				
	[°C]	[ms]	[ms]				
5725650220							2); 6)
5725650920							1); 2); 6)
5725655270	-15°C / +50°C	37	97	13, 14	IP 65	1.3	2); 6)
5725655280							2); 6)
5725655980							1); 2); 6)
5725655202	-15°C / +70°C	-	-	-	-	1	2); 4); 7)
R412008098	-15°C / +50°C	-	-	13, 14	-	1	1); 2); 5); 7)
R412000127							
R412000148	-15°C / +50°C	37	97	13, 14	IP 65	1.3	3); 6)
R412000149							
R412000151	-15°C / +70°C	-	-	-	-	1	3); 4); 7)
R412000224							
R412000225	-15°C / +50°C	37	97	13, 14	IP 65	1.3	2); 6)
R412000230							
R412000237	-15°C / +70°C	-	-	-	-	1	2); 4); 7)
5725680220							
5725685270	-15°C / +50°C	37	97	13, 14	IP 65	1.3	3); 6)
5725685280							

HHB = Manual override

- 1) Exhaust cap
- 2) Pilot: internal
- 3) Pilot: External
- 4) Basic valve without pilot valve
- 5) Basic valve without coil
- 6) Protected against polarity reversal
- 7) ATEX optional

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

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Part No.	Medium temperature min./max.	Switch-on time	Switch-off time	Compatibility index	Protection class	Weight	Note
	[°C]	t_F [ms]	t_E [ms]			[kg]	
5725685202	-15°C / +70°C	-	-	-	-	1	3); 4); 7)
R412000219	-15°C / +50°C	37	97	13, 14	IP 65	1.3	2); 6)
R412000220							
R412000221							
R412000222	-15°C / +70°C	-	-	-	-	1	2); 4); 7)
R412000153	-15°C / +50°C	37	97	13, 14	IP 65	1.3	3); 6)
R412000154							
R412000157							
R412000160	-15°C / +70°C	-	-	-	-	1	3); 4); 7)

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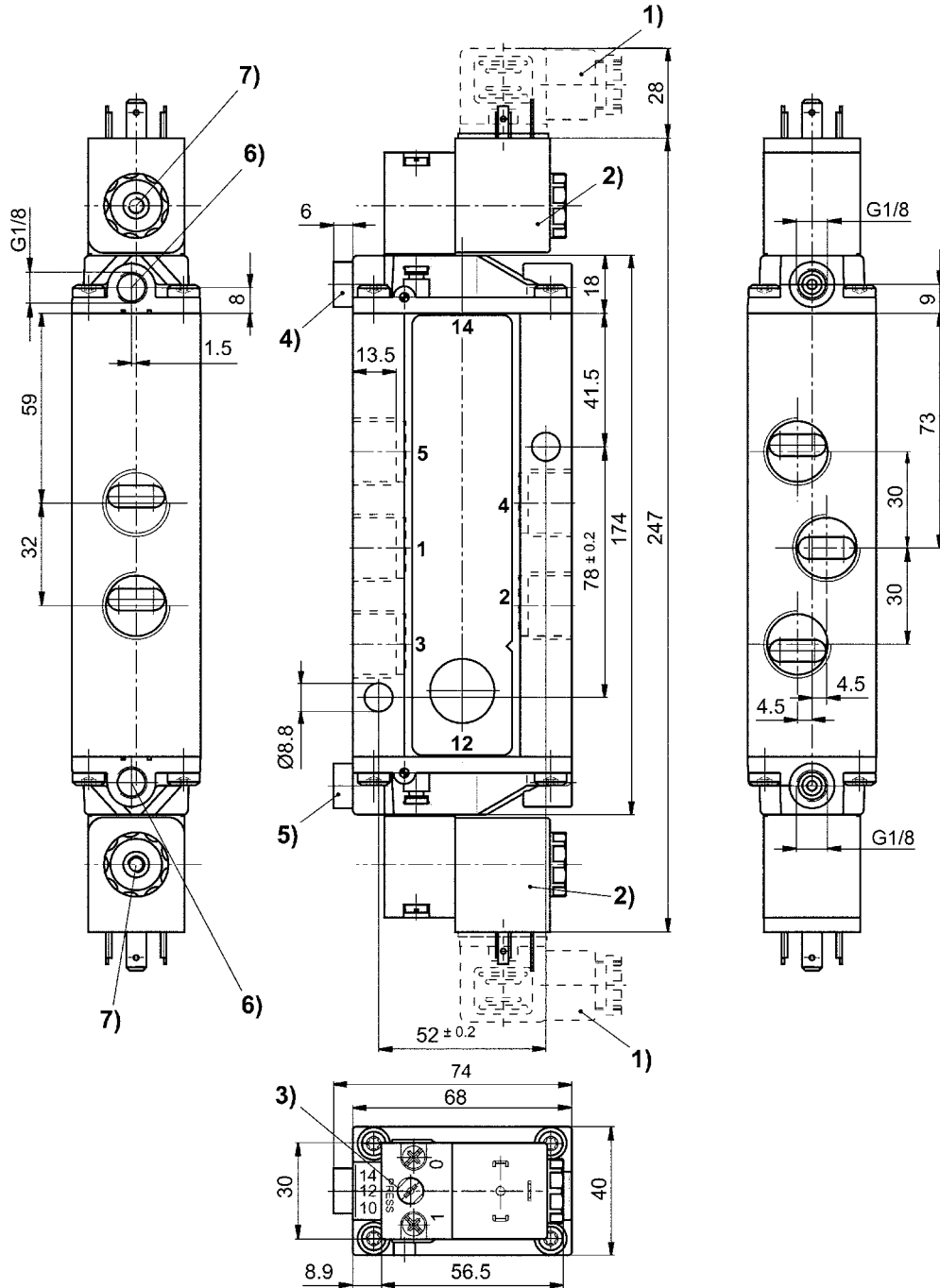
- 1) Exhaust cap
 - 2) Pilot: internal
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 - 4) Basic valve without pilot valve
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- Nominal flow Q_n at 6 bar and $\Delta p = 1$ bar

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Dimensions



D572_555

- 1) el. connector 2) coil can be rotated at 90° intervals 3) manual override
4) port X, side 14 5) port X, side 12 6) port without function 7) pilot exhaust port, M5