

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/m³ - 1 mg/m³
Nominal flow Qn	See table below
Nominal flow 1 ► 2	See table below
Nominal flow 2 ► 3	See table below
Compressed air connection	according to ISO 228-1 with directional pilot air exhaust EN 175301-803:2006
Connector standard	See table below
Protection class 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 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“.
- 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.

Operational 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			Part No.
		Input	Output	Exhaust	Pilot Input	Pilot Exhaust	DC	AC 50 Hz	AC 60 Hz	
		G 1/2	G 1/2	G 1/2	-	-	24 V	-	-	5725650220
							24 V	-	-	5725650920
							-	110 V	110 V	5725655270
							-	230 V	230 V	5725655280
							-	230 V	230 V	5725655980
	-	G 1/2	G 1/2	G 1/2	-	-	-	-	-	5725655202

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 2017-03-08, ©AVENTICS S.à r.l., subject to change

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

	MO	Compressed air connection					Operating voltage			Part No.
		Input	Output	Exhaust	Pilot Input	Pilot Exhaust	DC	AC 50 Hz	AC 60 Hz	
		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	R412000148
							-	230 V	230 V	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	R412000225
							-	230 V	230 V	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	5725685270
							-	230 V	230 V	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	R412000220
							-	230 V	230 V	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	R412000154
							-	230 V	230 V	R412000157
	-	G 1/2	G 1/2	G 1/2	G 1/8	-	-	-	-	R412000160

Part No.	Power consumption	Holding power	Holding power	Switch-on power	Switch-on power	Flow rate value			Working pressure min./max.	Control pressure min./max.	Ambient temperature min./max.
						Qn	Qn 1►2	Qn 2►3			
	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz						
	[W]	[VA]	[VA]	[VA]	[VA]	[l/min]			[bar]	[bar]	[°C]
5725650220	2.1	-	-	-	-	3800	3800	3800	3 / 10	3 / 10	-15°C / +50°C
5725650920	2.1	-	-	-	-						
5725655270	-	4.3	3.3	6.8	5.7						
5725655280	-	4.4	3.5	6.9	6.2						
5725655980	-	4.4	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

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

Part No.	Power consumption	Hold- ing power	Hold- ing power	Switch- on power	Switch- on power	Flow rate value			Working pressure min./max.	Control pressure min./max.	Ambient tempera- ture min./ max.
	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz	Qn	Qn 1►2	Qn 2►3			
	[W]	[VA]	[VA]	[VA]	[VA]	[l/min]			[bar]	[bar]	[°C]
R412000127	2.1	-	-	-	-						
R412000148	-	4.3	3.3	6.8	5.7	3800	3800	3800	-0.95 / 16	3 / 10	-15°C / +50°C
R412000149	-	4.4	3.5	6.9	6.2						
R412000151	-	-	-	-	-	3800	3800	3800	-0.95 / 16	3 / 16	-15°C / +70°C
R412000224	2.1	-	-	-	-						
R412000225	-	4.3	3.3	6.8	5.7	-	3600	4100	3 / 10	3 / 10	-15°C / +50°C
R412000230	-	4.4	3.5	6.9	6.2						
R412000237	-	-	-	-	-	-	3600	4100	3 / 16	3 / 16	-15°C / +70°C
5725680220	2.1	-	-	-	-						
5725685270	-	4.3	3.3	6.8	5.7	-	3600	4100	-0.95 / 16	3 / 10	-15°C / +50°C
5725685280	-	4.4	3.5	6.9	6.2						
5725685202	-	-	-	-	-	-	3600	4100	-0.95 / 16	3 / 16	-15°C / +70°C
R412000219	2.1	-	-	-	-						
R412000220	-	4.3	3.3	6.8	5.7	-	4100	3800	3 / 10	3 / 10	-15°C / +50°C
R412000221	-	4.4	3.5	6.9	6.2						
R412000222	-	-	-	-	-	-	4100	3800	3 / 16	3 / 16	-15°C / +70°C
R412000153	2.1	-	-	-	-						
R412000154	-	4.3	3.3	6.8	5.7	-	4100	3800	-0.95 / 16	3 / 10	-15°C / +50°C
R412000157	-	4.4	3.5	6.9	6.2						
R412000160	-	-	-	-	-	-	4100	3800	-0.95 / 16	3 / 16	-15°C / +70°C

Part No.	Medium tem- perature min./ max.	Switch-on time	Switch-off time	Compatibility index	Protection class	Weight	Note
	[°C]	[ms]	[ms]			[kg]	
5725650220	-15°C / +50°C	37	97	13, 14	IP65	1.3	2); 6)
5725650920							1); 2); 6)
5725655270							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	-15°C / +50°C	37	97	13, 14	IP65	1.3	3); 6)
R412000148							
R412000149							
R412000151	-15°C / +70°C	-	-	-	-	1	3); 4); 7)
R412000224	-15°C / +50°C	37	97	13, 14	IP65	1.3	2); 6)
R412000225							
R412000230							

MO = 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 Δp = 1 bar

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 2017-03-08, ©AVENTICS S.à r.l., subject to change

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

Part No.	Medium temperature min./max.	Switch-on time	Switch-off time	Compatibility index	Protection class	Weight	Note
	[°C]	[ms]	[ms]			[kg]	
R412000237	-15°C / +70°C	-	-	-	-	1	2); 4); 7)
5725680220							
5725685270	-15°C / +50°C	37	97	13, 14	IP65	1.3	3); 6)
5725685280							
5725685202	-15°C / +70°C	-	-	-	-	1	3); 4); 7)
R412000219							
R412000220	-15°C / +50°C	37	97	13, 14	IP65	1.3	2); 6)
R412000221							
R412000222	-15°C / +70°C	-	-	-	-	1	2); 4); 7)
R412000153							
R412000154	-15°C / +50°C	37	97	13, 14	IP65	1.3	3); 6)
R412000157							
R412000160	-15°C / +70°C	-	-	-	-	1	3); 4); 7)

MO = 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

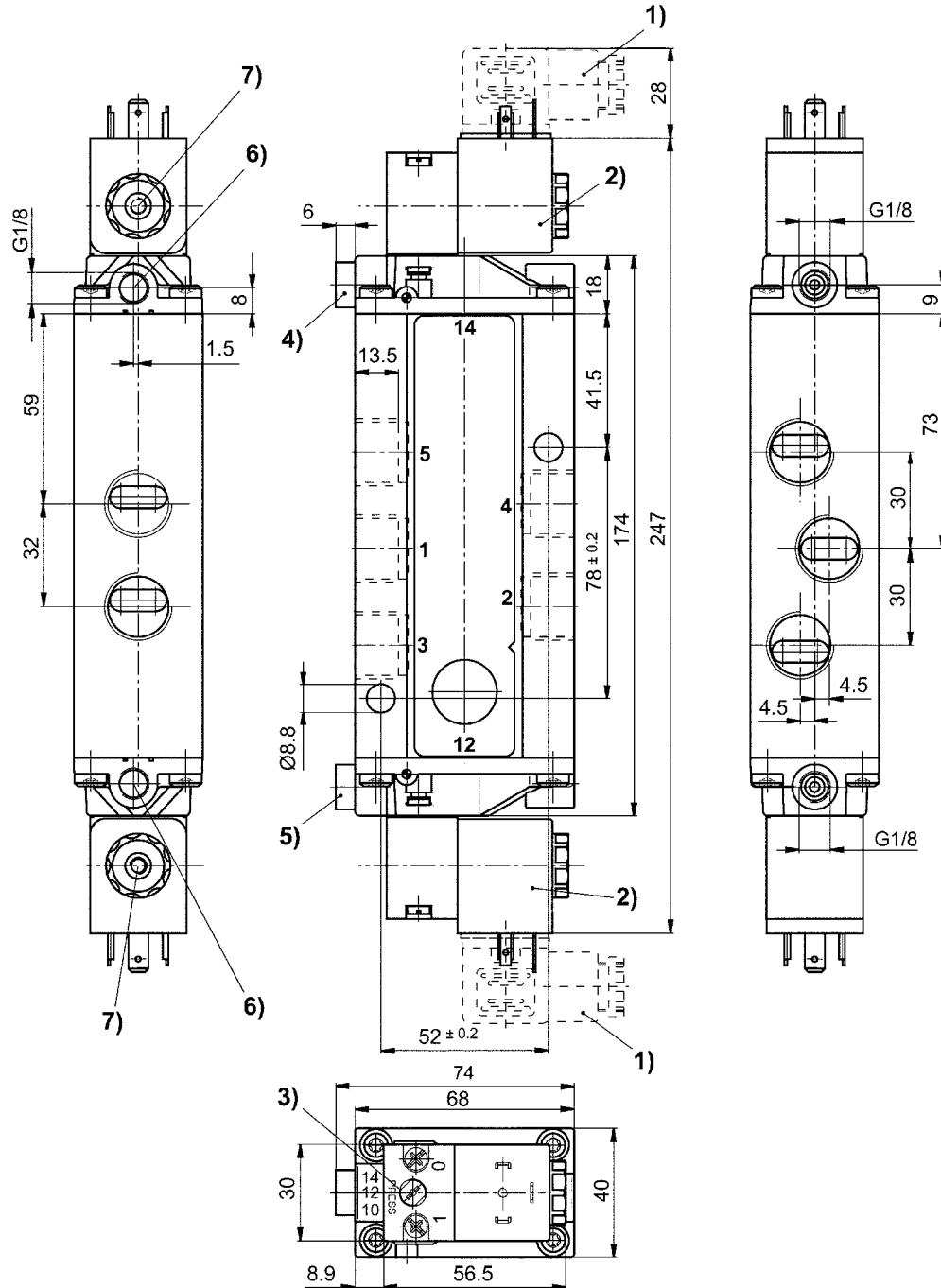
Nominal flow Qn at 6 bar and $\Delta p = 1$ bar

Directional valves ► Electrically operated

5/3-directional valve, Series CD12

► $Q_n = 3600 - 4100 \text{ l/min}$ ► 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

Dimensions



- 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

D572_555