

5/2-directional valve, Series CD12

- 5/2
- Qn = 4100 l/min
- Pilot valve width : 30 mm
- Pipe connection
- Compressed air connection output : G 1/2
- Electrical connection : Plug, EN 175301-803, form A, 3-pin
- -25 °C cold-resistant
- Manual override : with detent, without detent
- double solenoid
- Pilot : Internal External



Type	Spool valve, positive overlapping
Activation	Electrically
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 ... 1 mg/m³
Nominal flow Qn	4100 l/min
Compressed air connection	according to ISO 228-1
Pilot control exhaust	with directional pilot air exhaust
Connector standard	EN 175301-803:2006
Reverse polarity protection	Protected against polarity reversal
Compatibility index	See table below
Duty cycle	100 %
Weight	See table below

Technical data

Part No.		MO	Compressed air connection	
			Input	Output
R412008097		T-R-T-R-T-R-T-R-T-R	G 1/2	G 1/2
5725550220			G 1/2	G 1/2
5725555270			G 1/2	G 1/2
5725555280			G 1/2	G 1/2
5725555202		T-R-T-R-T-R-T-R-T-R	G 1/2	G 1/2
5725560220			G 1/2	G 1/2
5725565270			G 1/2	G 1/2
5725565280			G 1/2	G 1/2
5725565202		T-R-T-R-T-R-T-R-T-R	G 1/2	G 1/2

Part No.	Compressed air connection	
	Exhaust	Pilot Input
R412008097	G 1/2	-
5725550220	G 1/2	-
5725555270	G 1/2	-
5725555280	G 1/2	-
5725555202	G 1/2	-
5725560220	G 1/2	G 1/8
5725565270	G 1/2	G 1/8
5725565280	G 1/2	G 1/8
5725565202	G 1/2	G 1/8

Part No.	Compressed air connection		Operational voltage	
	Pilot Exhaust		DC	AC 50 Hz
R412008097	-		-	-
5725550220	M5		24 V	-
5725555270	M5		-	110 V
5725555280	M5		-	230 V
5725555202	-		-	-
5725560220	M5		24 V	-
5725565270	M5		-	110 V
5725565280	M5		-	230 V
5725565202	-		-	-

Part No.	Operational voltage	Voltage tolerance		
		DC	AC 50 Hz	AC 60 Hz
R412008097	-	-	-	-
5725550220	-	-10% / +10%	-	-
5725555270	110 V	-	-20% / +10%	-10% / +20%
5725555280	230 V	-	-20% / +10%	-10% / +20%
5725555202	-	-	-	-
5725560220	-	-10% / +10%	-	-
5725565270	110 V	-	-20% / +10%	-10% / +20%
5725565280	230 V	-	-20% / +10%	-10% / +20%
5725565202	-	-	-	-

Part No.	Power consumption	Holding power	Holding power	Switch-on power
	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz
R412008097	-	-	-	-
5725550220	2,1 W	-	-	-
5725555270	-	4,3 VA	3,3 VA	6,8 VA
5725555280	-	4,4 VA	3,5 VA	6,9 VA
5725555202	-	-	-	-
5725560220	2,1 W	-	-	-
5725565270	-	4,3 VA	3,3 VA	6,8 VA
5725565280	-	4,4 VA	3,5 VA	6,9 VA
5725565202	-	-	-	-

Part No.	Switch-on power	Pilot	Working pressure min./max.	Control pressure min./max.
	AC 60 Hz			
R412008097	-	Internal	2 ... 10 bar	2 ... 10 bar
5725550220	-	Internal	2 ... 10 bar	2 ... 10 bar
5725555270	5,7 VA	Internal	2 ... 10 bar	2 ... 10 bar
5725555280	6,2 VA	Internal	2 ... 10 bar	2 ... 10 bar
5725555202	-	Internal	2 ... 16 bar	2 ... 16 bar
5725560220	-	External	-0,95 ... 16 bar	2 ... 10 bar
5725565270	5,7 VA	External	-0,95 ... 16 bar	2 ... 10 bar
5725565280	6,2 VA	External	-0,95 ... 16 bar	2 ... 10 bar
5725565202	-	External	-0,95 ... 16 bar	2 ... 16 bar

Part No.	Ambient temperature min./max.	Medium temperature min./max.	Typ. switch-on time
R412008097	-25 ... 50 °C	-25 ... 50 °C	-
5725550220	-25 ... 50 °C	-25 ... 50 °C	36 ms
5725555270	-25 ... 50 °C	-25 ... 50 °C	36 ms
5725555280	-25 ... 50 °C	-25 ... 50 °C	36 ms
5725555202	-25 ... 70 °C	-25 ... 70 °C	-
5725560220	-25 ... 50 °C	-25 ... 50 °C	36 ms
5725565270	-25 ... 50 °C	-25 ... 50 °C	36 ms
5725565280	-25 ... 50 °C	-25 ... 50 °C	36 ms
5725565202	-25 ... 70 °C	-25 ... 70 °C	-

Part No.	Typ. switch-off time	Compatibility index	Protection class	basic valve with electrical connector
			with connection	
R412008097	-	13 14	-	Basic valve without coil
5725550220	36 ms	13 14	IP65	-
5725555270	36 ms	13 14	IP65	-
5725555280	36 ms	13 14	IP65	-
5725555202	-	-	-	Basic valve without pilot valve
5725560220	36 ms	13 14	IP65	-
5725565270	36 ms	13 14	IP65	-
5725565280	36 ms	13 14	IP65	-
5725565202	-	-	-	Basic valve without pilot valve

Part No.	Reverse polarity protection	ATEX	Weight	
R412008097	-	ATEX optional	0,9 kg	1)

Part No.	Reverse polarity protection	ATEX	Weight	
5725550220	Protected against polarity reversal	-	1,2 kg	-
5725555270	Protected against polarity reversal	-	1,2 kg	-
5725555280	Protected against polarity reversal	-	1,2 kg	-
5725555202	-	ATEX optional	0,9 kg	-
5725560220	Protected against polarity reversal	-	1,2 kg	-
5725565270	Protected against polarity reversal	-	1,2 kg	-
5725565280	Protected against polarity reversal	-	1,2 kg	-
5725565202	-	ATEX optional	0,9 kg	-

Nominal flow Qn at 6 bar and $\Delta p = 1$ bar, MO = Manual override

1) Exhaust cap

Technical information

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. Further information can be found in the "Technical information" document (available in the MediaCentre).

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.

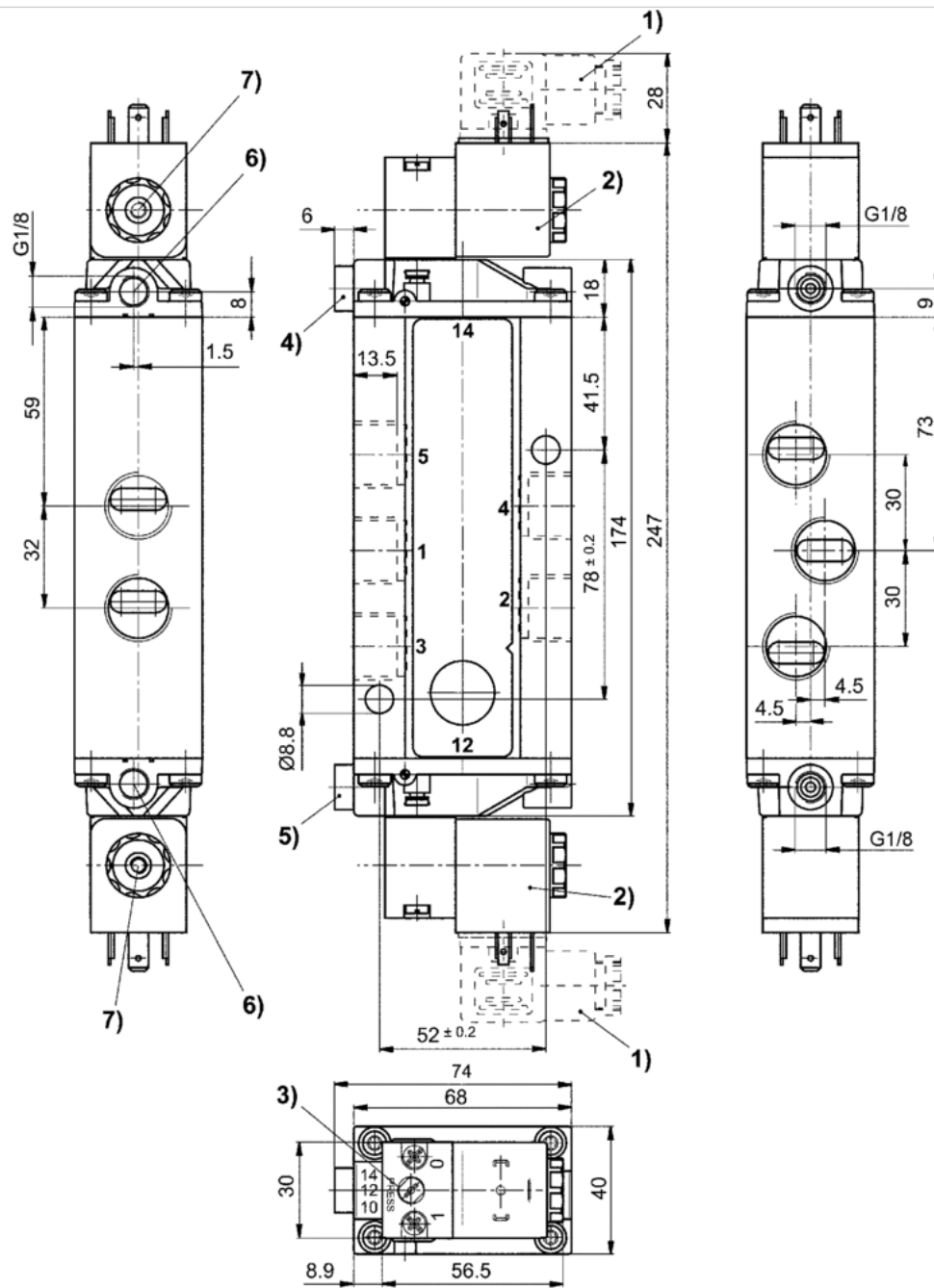
*Note: Basic valves feature a maximum working pressure of 16 bar. When combined with standard CNOMO pilots, the maximum working pressure is 10 bar.

Technical information

Material	
Housing	Aluminum Polyamide fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber Polyurethane

Dimensions

Dimensions



1) Valve plug 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 valve exhaust, M5

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