

5/2-directional valve, Series CD12

- 5/2
- Qn = 4100 l/min
- Pilot valve width : 30 mm
- Pipe connection
- Compressed air connection output : M22x1,5
- Electrical connection : Plug, EN 175301-803, form A, 3-pin
- -25 °C cold-resistant
- Manual override : with detent, without detent
- single 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
Pilot control exhaust	with directional pilot air exhaust
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
5725400220		—	M22x1,5	M22x1,5
5725405270		—	M22x1,5	M22x1,5
5725405280		—	M22x1,5	M22x1,5
5725405202		—	M22x1,5	M22x1,5
R412013341		—	M22x1,5	M22x1,5
R412013342		—	M22x1,5	M22x1,5
R412000243		—	M22x1,5	M22x1,5
R412000242		—	M22x1,5	M22x1,5

Part No.	Compressed air connection	
	Exhaust	Pilot Input
5725400220	M22x1,5	-
5725405270	M22x1,5	-
5725405280	M22x1,5	-
5725405202	M22x1,5	-
R412013341	M22x1,5	-
R412013342	M22x1,5	-
R412000243	M22x1,5	-
R412000242	M22x1,5	G 1/8

Part No.	Compressed air connection		Operational voltage	
	Pilot Exhaust		DC	AC 50 Hz
5725400220	M5		24 V	-
5725405270	M5		-	110 V
5725405280	M5		-	230 V
5725405202	-		-	-
R412013341	M5		24 V	-
R412013342	M5		-	230 V
R412000243	-		-	-
R412000242	-		-	-

Part No.	Operational voltage	Voltage tolerance		
		DC	AC 50 Hz	AC 60 Hz
5725400220	-	-10% / +10%	-	-
5725405270	110 V	-	-20% / +10%	-10% / +20%
5725405280	230 V	-	-20% / +10%	-10% / +20%
5725405202	-	-	-	-
R412013341	-	-10% / +10%	-	-
R412013342	230 V	-	-20% / +10%	-10% / +20%
R412000243	-	-	-	-
R412000242	-	-	-	-

Part No.	Power consumption		Holding power		Switch-on power
	DC		AC 50 Hz	AC 60 Hz	AC 50 Hz
5725400220	2,1 W		-	-	-

Part No.	Power consumption	Holding power	Holding power	Switch-on power
	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz
5725405270	-	4,3 VA	3,3 VA	6,8 VA
5725405280	-	4,4 VA	3,5 VA	6,9 VA
5725405202	-	-	-	-
R412013341	2,1 W	-	-	-
R412013342	-	4,4 VA	3,5 VA	6,9 VA
R412000243	-	-	-	-
R412000242	-	-	-	-

Part No.	Switch-on power	Pilot	Working pressure min./max.	Control pressure min./max.
	AC 60 Hz			
5725400220	-	Internal	2 ... 10 bar	2 ... 10 bar
5725405270	5,7 VA	Internal	2 ... 10 bar	2 ... 10 bar
5725405280	6,2 VA	Internal	2 ... 10 bar	2 ... 10 bar
5725405202	-	Internal	2 ... 16 bar	2 ... 16 bar
R412013341	-	Internal	2 ... 10 bar	2 ... 10 bar
R412013342	6,2 VA	Internal	2 ... 10 bar	2 ... 10 bar
R412000243	-	Internal	2 ... 16 bar	2 ... 16 bar
R412000242	-	External	-0,95 ... 16 bar	2 ... 10 bar

Part No.	Ambient temperature min./max.	Medium temperature min./max.	Typ. switch-on time
5725400220	-25 ... 50 °C	-25 ... 50 °C	37 ms
5725405270	-25 ... 50 °C	-25 ... 50 °C	37 ms
5725405280	-25 ... 50 °C	-25 ... 50 °C	37 ms
5725405202	-25 ... 70 °C	-25 ... 70 °C	-
R412013341	-15 ... 50 °C	-15 ... 50 °C	37 ms
R412013342	-15 ... 50 °C	-15 ... 50 °C	37 ms
R412000243	-15 ... 70 °C	-15 ... 70 °C	-
R412000242	-15 ... 70 °C	-15 ... 70 °C	-

Part No.	Typ. switch-off time	Compatibility index	Protection class	basic valve with electrical connector
			with connection	
5725400220	97 ms	13 14	IP65	-
5725405270	97 ms	13 14	IP65	-
5725405280	97 ms	13 14	IP65	-
5725405202	-	-	-	Basic valve without pilot valve
R412013341	97 ms	13 14	IP65	-
R412013342	97 ms	14	IP65	-
R412000243	-	-	-	Basic valve without pilot valve
R412000242	97 ms	-	-	Basic valve without pilot valve

Part No.	Reverse polarity protection	ATEX	Weight
5725400220	Protected against polarity reversal	-	0,99 kg
5725405270	Protected against polarity reversal	-	0,99 kg
5725405280	Protected against polarity reversal	-	0,99 kg
5725405202	-	ATEX optional	0,84 kg
R412013341	Protected against polarity reversal	-	1 kg
R412013342	Protected against polarity reversal	-	1 kg

Part No.	Reverse polarity protection	ATEX	Weight
R412000243	-	ATEX optional	0,84 kg
R412000242	-	ATEX optional	1 kg

Base valves without pilot valves can be combined with DO30 series valves., Nominal flow Qn at 6 bar and Δp = 1 bar, MO = Manual override

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).

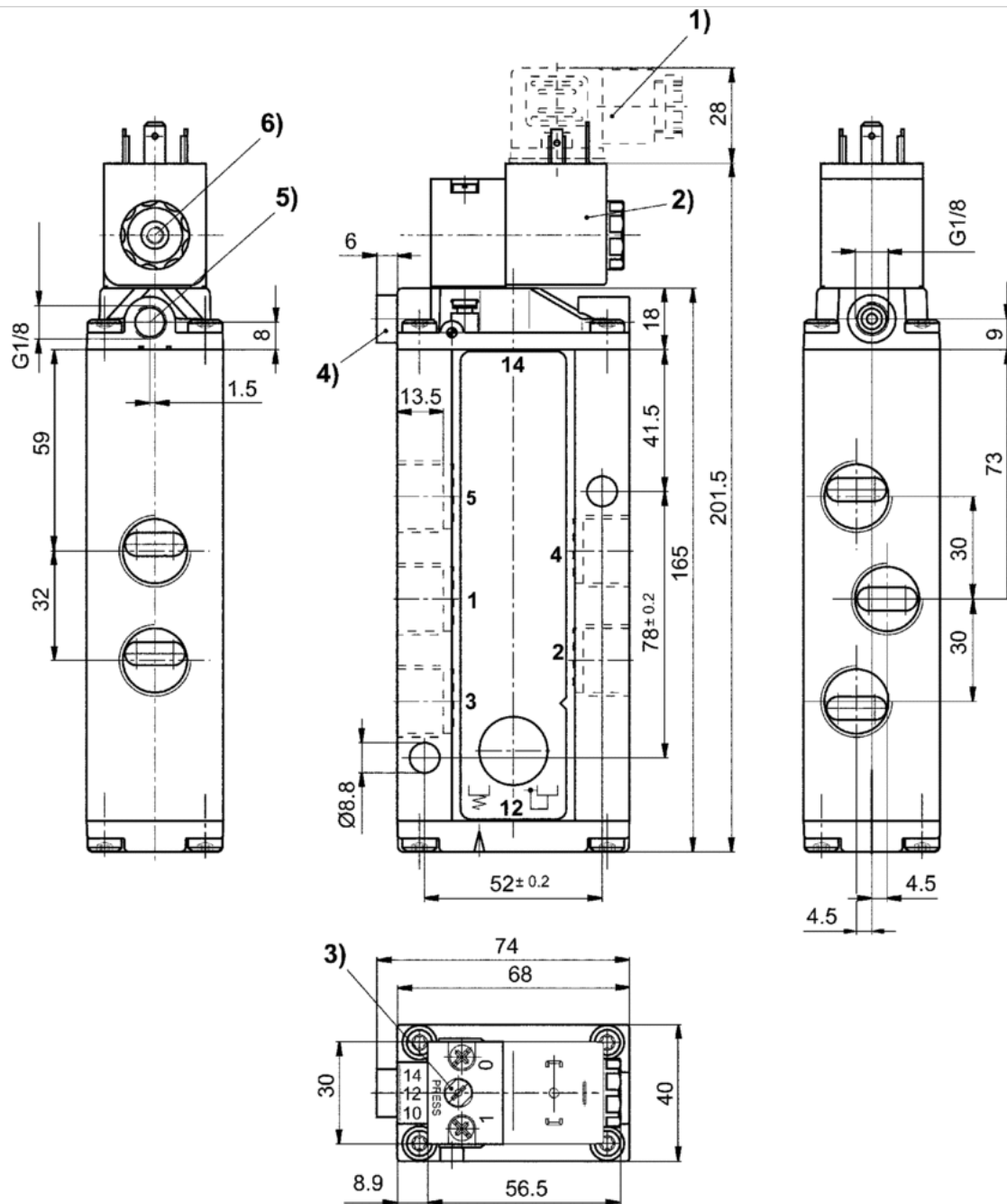
*Note: Basic valves feature a maximum working pressure of 16 bar. When combined with standard CNOMO pilots, the maximum working pressure is 10 bar.

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 (only for externally piloted valves) 5) Exhaust port of piston 6) Pilot valve exhaust, M5

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