

3/2-directional valve, Series CD12

- 3/2
- Qn = 4000 l/min
- Pilot valve width : 30 mm
- NC/NO
- 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
- single solenoid
- With spring return
- 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	4000 l/min
Nominal flow 1 ► 2	4000 l/min
Nominal flow 2 ► 3	4000 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	
5724550220		—	NC/NO	G 1/2	
5724555270		—	NC/NO	G 1/2	
5724555280		—	NC/NO	G 1/2	
5724555202		—	NC/NO	G 1/2	
5724560220		—	NC/NO	G 1/2	
5724565270		—	NC/NO	G 1/2	
5724565280		—	NC/NO	G 1/2	
5724565202		—	NC/NO	G 1/2	

Part No.	Compressed air connection		Compressed air connection	
	Output		Exhaust	
5724550220	G 1/2		G 1/2	
5724555270	G 1/2		G 1/2	
5724555280	G 1/2		G 1/2	
5724555202	G 1/2		G 1/2	
5724560220	G 1/2		G 1/2	
5724565270	G 1/2		G 1/2	
5724565280	G 1/2		G 1/2	
5724565202	G 1/2		G 1/2	

Part No.	Compressed air connection		Compressed air connection	
	Pilot Input		Pilot Exhaust	
5724550220	-		M5	
5724555270	-		M5	
5724555280	-		M5	
5724555202	-		-	
5724560220	G 1/8		M5	
5724565270	G 1/8		M5	
5724565280	G 1/8		M5	
5724565202	G 1/8		-	

Part No.	Operational voltage		Operational voltage	
	DC		AC 50 Hz	
5724550220	24 V		-	
5724555270	-		110 V	
5724555280	-		230 V	
5724555202	-		-	
5724560220	24 V		-	
5724565270	-		110 V	
5724565280	-		230 V	
5724565202	-		-	

Part No.	Voltage tolerance		Voltage tolerance		Power consumption	
	DC		AC 50 Hz		DC	
5724550220	-10% / +10%		-		2,1 W	
5724555270	-		-20% / +10%		-	

Part No.	Voltage tolerance	Voltage tolerance	Voltage tolerance	Power consumption
	DC	AC 50 Hz	AC 60 Hz	DC
5724555280	-	-20% / +10%	-10% / +20%	-
5724555202	-	-	-	-
5724560220	-10% / +10%	-	-	2,1 W
5724565270	-	-20% / +10%	-10% / +20%	-
5724565280	-	-20% / +10%	-10% / +20%	-
5724565202	-	-	-	-

Part No.	Holding power	Holding power	Switch-on power	Switch-on power	Pilot
	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz	
5724550220	-	-	-	-	Internal
5724555270	4,3 VA	3,3 VA	6,8 VA	5,7 VA	Internal
5724555280	4,4 VA	3,5 VA	6,9 VA	6,2 VA	Internal
5724555202	-	-	-	-	Internal
5724560220	-	-	-	-	External
5724565270	4,3 VA	3,3 VA	6,8 VA	5,7 VA	External
5724565280	4,4 VA	3,5 VA	6,9 VA	6,2 VA	External
5724565202	-	-	-	-	External

Part No.	Working pressure min./max.	Control pressure min./max.	Ambient temperature min./max.
5724550220	2 ... 10 bar	2 ... 10 bar	-25 ... 50 °C
5724555270	2 ... 10 bar	2 ... 10 bar	-25 ... 50 °C
5724555280	2 ... 10 bar	2 ... 10 bar	-25 ... 50 °C
5724555202	2 ... 16 bar	2 ... 16 bar	-25 ... 70 °C
5724560220	-0,95 ... 16 bar	2 ... 10 bar	-25 ... 50 °C
5724565270	-0,95 ... 16 bar	2 ... 10 bar	-25 ... 50 °C
5724565280	-0,95 ... 16 bar	2 ... 10 bar	-25 ... 50 °C
5724565202	-0,95 ... 16 bar	2 ... 16 bar	-25 ... 70 °C

Part No.	Medium temperature min./max.	Typ. switch-on time	Typ. switch-off time	Compatibility index
5724550220	-25 ... 50 °C	34 ms	90 ms	13 14
5724555270	-25 ... 50 °C	34 ms	90 ms	13 14
5724555280	-25 ... 50 °C	34 ms	90 ms	13 14
5724555202	-25 ... 70 °C	-	-	-
5724560220	-25 ... 50 °C	34 ms	90 ms	13 14
5724565270	-25 ... 50 °C	34 ms	90 ms	13 14
5724565280	-25 ... 50 °C	34 ms	90 ms	13 14
5724565202	-25 ... 70 °C	-	-	-

Part No.	Protection class	basic valve with electrical connector
	with connection	
5724550220	IP65	-
5724555270	IP65	-
5724555280	IP65	-
5724555202	-	Basic valve without pilot valve
5724560220	IP65	-
5724565270	IP65	-
5724565280	IP65	-

Part No.	Protection class	basic valve with electrical connector
	with connection	
5724565202	-	Basic valve without pilot valve

Part No.	Reverse polarity protection	ATEX	Weight	
5724550220	Protected against polarity reversal	-	0,85 kg	-
5724555270	Protected against polarity reversal	-	0,85 kg	-
5724555280	Protected against polarity reversal	-	0,85 kg	-
5724555202	-	ATEX optional	0,7 kg	1)
5724560220	Protected against polarity reversal	-	0,85 kg	-
5724565270	Protected against polarity reversal	-	0,85 kg	-
5724565280	Protected against polarity reversal	-	0,85 kg	-
5724565202	-	ATEX optional	0,7 kg	1)

Nominal flow Q_n at 6 bar and Δp = 1 bar, MO = Manual override

1) temperature range for ATEX application: -10 °C ... 60 °C

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.

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.

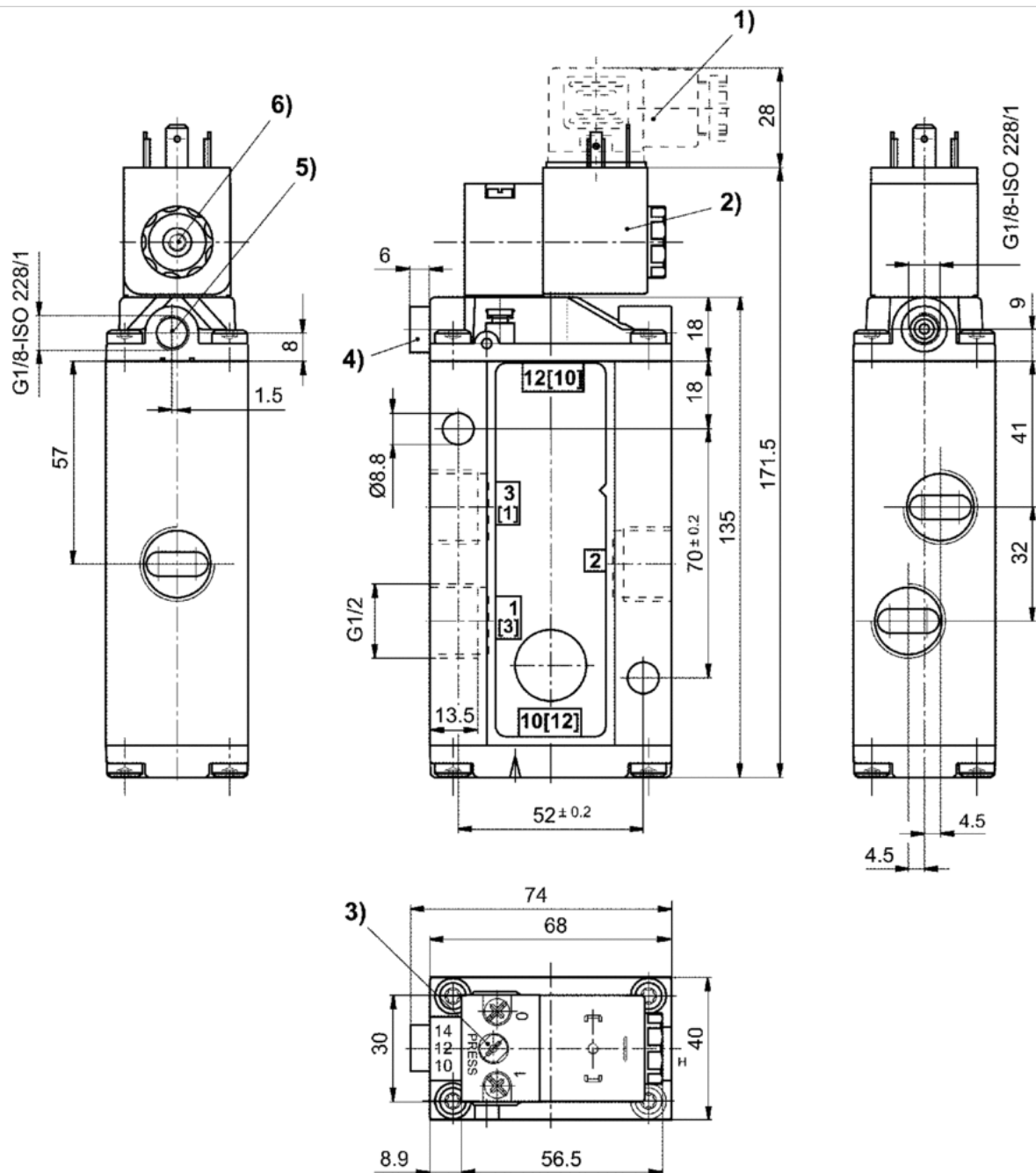
*Note: Basic valves feature a maximum working pressure of 16 bar. When combined with standard CNOMO pilots, the maximum working pressure is 10 bar.

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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