

5/2-directional valve, Series L1

L12BB452O000061

Series L1

2025-02-10

- Highly repeatable and reliable performance in harsh environments
- Robust construction provides industry-leading life cycle performance
- Ideal for high cycle-rate machine applications
- Speed controls enable machine cycle rate optimization

AVENTICS Series L1 Solenoid Pilot or Air Pilot Actuated Valves

The AVENTICS Series L1 spool and sleeve valves offer speed and high flow capacity in a compact design. They are available with solenoid pilot or air pilot actuation. The L1's slim design .875" body width is ideal for inline mounting. The valves provide industry-leading life cycle performance and deliver high reliability in harsh environments. The L1 Series valves are suitable for high cycle machine operations such as automotive, bottling, tire manufacturing, life science, press room and metal stamping applications.



Technical data

Industry

Activation

Valve type

Switching principle

Actuating control

Sealing principle

Connection type

Manual override

Industrial

Electrically

Spool valve (Spool & Sleeve)

5/2, double solenoid

Double Solenoid

metal/metal sealing

Pipe connection

with detent

Standard compressed air connection

Compressed air connection input

Compressed air connection output

Compressed air connection, exhaust

Pilot control exhaust

according to ANSI B1.20.3

1/4 NPTF

1/4 NPTF

1/4 NPTF

with directional pilot air exhaust

Nominal flow Qn

985 l/min

Min. working pressure

-0.95 bar

Max. working pressure

10 bar

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Min. control pressure	1 bar
Max. control pressure	10 bar
Electrical connection type	Plug
Electrical connection size	EN 175301-803, form B (11mm)
Electrical connection number of poles	3-pin
Connector standard	EN 175301-803:2006
Protection class with connection	IP65
Reverse polarity protection	Protected against polarity reversal
Operational voltage	24 V DC
Operational voltage DC	24 V
Voltage tolerance DC	-10 % / +10 %
Pilot	Internal
Coil width	22 mm
Power consumption DC	3.5 W
Max. current consumption	150 mA
Duty cycle	100 %
Typ. switch-on time	10 ms
Typ. switch-off time	35 ms
Min. ambient temperature	-23 °C
Max. ambient temperature	46 °C
Min. medium temperature	-23 °C
Max. medium temperature	46 °C
Medium	Compressed air
Min. oil content of compressed air	0 mg/m ³
Max. oil content of compressed air	1 mg/m ³
Max. particle size	40 µm

Material

Housing material	Aluminum
Surface housing	painted
Seal material	caoutchouc/butadiene caoutchouc

Part No. L12BB452O000061

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 less than 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 <https://www.emerson.com/en-us/support>).

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Dimensions

