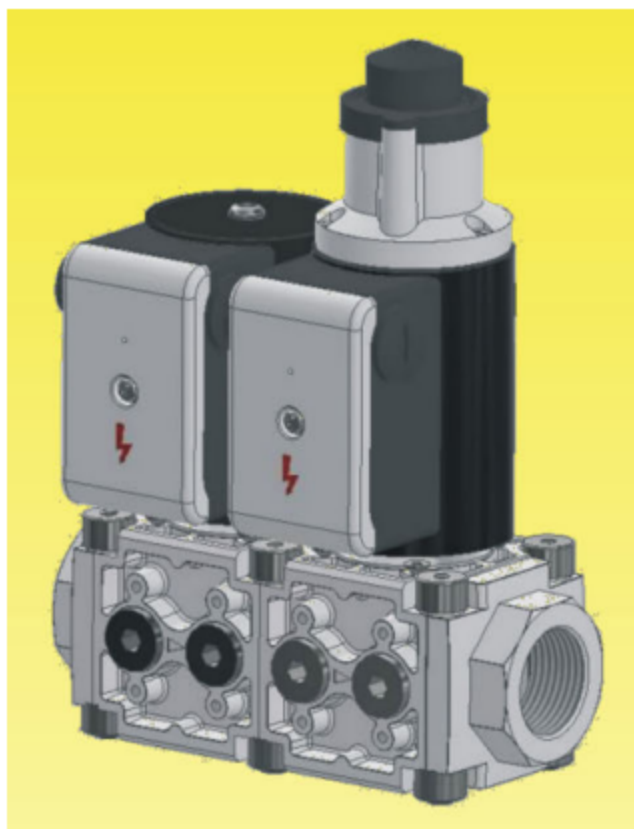




AZC.N/L

Series Gas Combination Solenoid Valve



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AZC.N/L Series Gas Combination Solenoid Valve

Overview

AZC.N series double quick opening gas combination solenoid valve.

AZC.L series slow opening and fast closing Gas Combined Solenoid Valve.

Both series are widely used in the field of safe transportation control to provide on-off or cut-off gas supply.

The solenoid valve is suitable for gas media, such as natural gas, methane, liquefied petroleum gas and other gases to do two-position on-off power exchange for heating and combustion medium pipelines.

It is widely used in metallurgical industry, textile industry and printing industry.

In the automatic control system of kiln heating in glass and light bulb industry and gas heating in other industries.



Fig. 1 AZC.N series double quick opening gas combination solenoid valve

Features

- It has a wide range of models and specifications and is suitable for a variety of gas media.
- Open time and close time: AZC.N series less than 1 second; AZC.L series 2-30 seconds adjustable.
- The coil connection box has a power indicator, which can directly observe the power on and off state of the valve.
- It can work normally under vacuum, negative pressure and zero pressure, and the highest working pressure is DN20-25: 360mbar; DN32-50: 200mbar.
- It has high safety, reliability, adaptability and economy.
- The opening time and flow rate of AZC.L series gas solenoid valve are adjustable.
- It has passed the CE type inspection and certification, and complies with EN 161:2011+A3:2013, Class A.

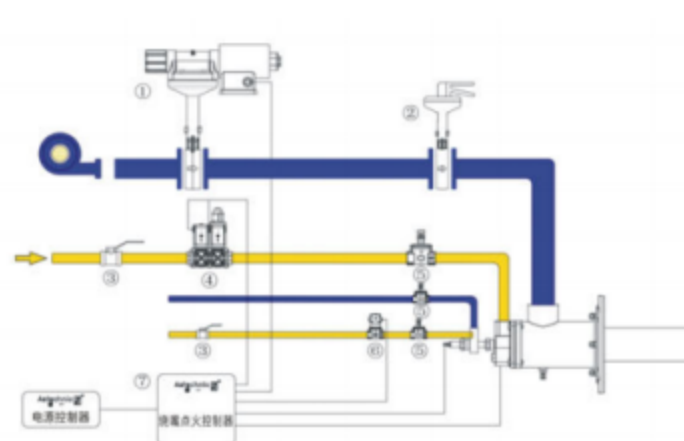


Fig. 2 AZC.L series slow opening and fast closing gas combined solenoid valve

Functions and Applications

- AZC series gas combination solenoid valve is a safety equipment suitable for cutting off gas circuit.
- AZC.N/L series gas combination solenoid valves have reliable working characteristics, so they are usually installed in gas pipelines as equipment for safety and gas flow regulation.
- The AZC.N/L series gas combination solenoid valve is usually closed, and the power is turned on quickly. The blue light is on after the power is turned on, and the light is turned off immediately after the power is cut off. There are by-pass holes on both sides of the valve body, and the aperture is G1/4".
- The AZC.L series gas combination solenoid valve is usually closed, and the mode state set by the factory can be re-adjusted in the power-on state for the first time, the opening time and the back-end output flow can be adjusted, and the fast or slow opening section within the open stroke range can be adjusted.

AZC.N/L Series Gas Combination Solenoid Valve



- ① Air Pulse Solenoid Valve ACK
- ② Manual Hot Air Butterfly Valve AVH
- ③ Gas manual shutoff valve
- ④ Gas combination solenoid valve AZC
- ⑤ Gas Fine Regulating Valve ASH
- ⑥ Gas Solenoid Valve AMR.N/AVE.N
- ⑦ Burner Ignition Controller ACU460/ACU480.

Fig. 3 AZC.N/L is used to safely cut off the gas pipeline in front of the burner

Installation dimensions and specifications

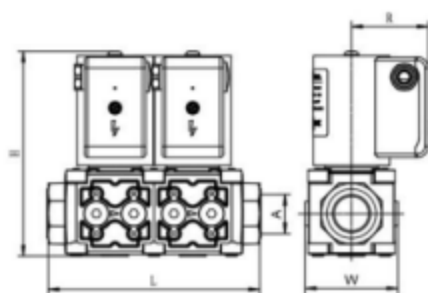


Fig. 4 Structure diagram of thread connection

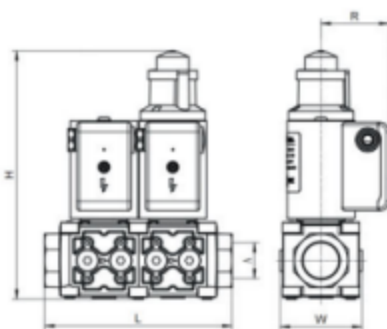


Fig. 5 Structure diagram of thread connection

Model	Nominal inner diameter	Connection mode	Internal thread	Length	Width	Height	Coil rotation radius	230V AC Power
			A	L	W	H	R(mm)	(W)
AZC15N	DN15	Thread connection	Rp1/2	65	55	124	49	14
AZC20N	DN20	Thread connection	Rp 3/4	158	70	153	62	20
AZC25N	DN25	Thread connection	Rp 1	158	70	153	65	20
AZC32N	DN32	Thread connection	Rp 1 1/4	237	102	211	65	45
AZC40N	DN40	Thread connection	Rp 1 1/2	237	102	211	77	45
AZC50N	DN50	Thread connection	Rp2	237	102	211	77	45
AZC20L	DN20	Thread connection	Rp 3/4	158	70	210	81	20
AZC25L	DN25	Thread connection	Rp 1	158	70	210	62	20
AZC32L	DN32	Thread connection	Rp 1 1/4	237	102	286	65	45
AZC40L	DN40	Thread connection	Rp 1 1/2	237	102	286	65	45
AZC50L	DN50	Thread connection	Rp2	237	102	286	81	45

AZC.N/L Series Gas Combination Solenoid Valve

AVE.L slow opening function adjustment

Slow opening function factory setting: maximum flow, valve port full slow opening (fast open stroke closed), valve port opening time about 8 seconds after electrification.

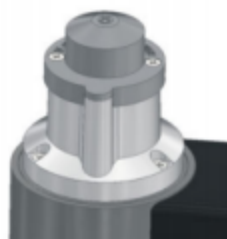


Fig. 6



Fig. 7



For additional settings, please refer to the following steps: 1. Loosen the two screws of the plastic lid (see Fig. 6) and remove the lid to see three functions.

Adjust the knob (see Fig. 7).

2. Flow regulation (see Fig. 8): maximum flow can be set through an adjustment nut with a flat position.

a. Adjustment range: 0-100% (recommended > 50%).

b. Factory setting: 100% (maximum flow), factory adjusted knob to the top position.

c. Adjustment method: place the wrench on the adjusting hexagonal nut: (i) rotate the wrench counterclockwise to increase the flow rate; (ii) rotate the wrench clockwise to reduce the flow rate; it is recommended that the downward stroke of this knob not exceed 6mm (that is, no more than 6 laps).

3. Initial quick-open stroke setting (see Fig. 9): when the Solenoid valve is powered on, it is allowed to quickly turn on a preset smaller flow, which can be used for ignition.

a. Adjustment range: 0-100% (recommended < 50%).

b. Factory setting: fast start stroke closed (all slow open), the factory has adjusted the knob to clockwise limit.

c. Adjustment method: place the screwdriver in the slot of the adjusting screw, which is located in the center of the valve: (i) rotate the screwdriver counterclockwise to increase the quick opening stroke; (ii) rotate the screwdriver clockwise to reduce the quick opening stroke; fine-tuning within 2 laps is recommended.

4. Slow opening time adjustment (see Fig. 10): after the Solenoid valve is powered on, after the valve port passes through the fast opening stroke, the slow opening speed of the valve port can be set by this knob.

a. Adjustment range: 2-30 seconds.

b. Factory setting: about 8 seconds.

c. Adjustment method: place the screwdriver in the slot of the adjusting screw: (i) rotate the screwdriver counterclockwise to increase the opening speed until it is fully opened; (ii) rotate the screwdriver clockwise to reduce the opening speed until it is completely closed; fine-tuning within 4 laps is recommended.



Fig. 8

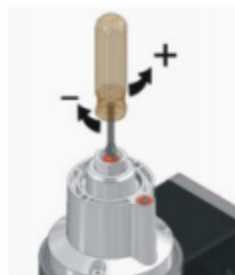


Fig. 9

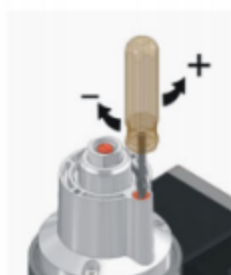


Fig. 10

AZC.N/L Series Gas Combination Solenoid Valve

AZC.N/L Series Gas Combination Solenoid Valve Technical Parameters

- Open time: AZC.N series less than 1 second; AZC.L series 2-30 seconds adjustable.
- Working medium: Natural gas, methane, liquefied petroleum gas, etc.
- Operating temperature: -15 °C ~ 60 °C.
- Maximum working frequency: 20 times per minute for AZC.N series and 1 times per minute for AZC.L series.
- Maximum working pressure: DN20-25: 360 MBAR; DN32-50: 200mbar.
- Rated voltage: 50/60Hz, 230Vac, coil grade F, can rotate 360 °, 100% long-term continuous operation.
- Protection level: IP54.
- Sealed Materials: nitrile butadiene rubber.
- Valve body material: aluminum alloy for valve; AISI 302 steel spring.
- Coil temperature: 65 °C (ambient temperature 20 °C).
- Standard and certification: "A" level standard.
- Service life: in line with the technical requirements of JB/T 7352-2010.
- Leakage: in line with the technical requirements of JB/T 7352-2010.
- Rated flow coefficient: in line with JB/T 7352-2010.

Order code and Model of AZC.N/L Series Gas Combination Solenoid Valve

No.	Order code	Model	Product Description	Actions
1	103080150001	AZC15N	Thread connection Rp 1/2	N: fast opening
2	103080200001	AZC20N	Thread connection Rp 3/4	
3	103080300001	AZC25N	Thread connection Rp 1	
4	103080320001	AZC32N	Thread connection Rp 1	
5	103080400001	AZC40N	Thread connection Rp 1	
6	103080500001	AZC50N	Thread connection Rp 2	
7	103080200002	AZC20L	Thread connection Rp 3/4	L: slow opening
8	103080300002	AZC25L	Thread connection Rp 1	
9	103080320002	AZC32L	Thread connection Rp 1	
10	103080400002	AZC40L	Thread connection Rp 1	
11	103080500002	AZC50L	Thread connection Rp 2	

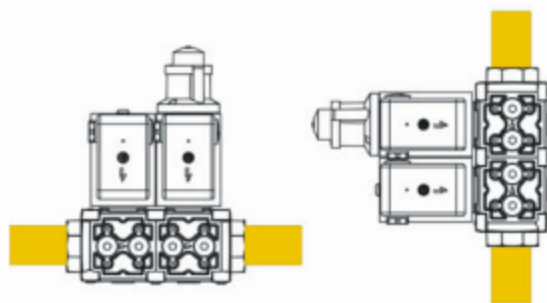
AZC.N/L Series Gas Combination Solenoid Valve

AZC.N/L Series Gas Combination Solenoid Valve Wiring

- According to the marks on the terminal block, connect the live wire and the zero line respectively, with a 1.0-2.5mm², voltage-resistant 500V BVR line;

Precautions for installation and use of AZC.N/L Series Gas Combination Solenoid Valve

- The horizontal pipe section with less vibration should be selected during installation. 90 degrees installation is allowed below DN50, and horizontal installation is only allowed above DN65.
- The parameters on the solenoid valve nameplate should be consistent with the actual use requirements.
- The arrowhead on the solenoid valve body should be consistent with the media flow direction.
- Please clean the pipe thoroughly before installation to avoid the failure of solenoid valve caused by foreign body damage diaphragm



Horizontal pipeline

Vertical pipe line

- Effective protection should be done if installed outdoors and in harsh environment.
- It is recommended to install a filter AF upstream of the solenoid valve to protect the solenoid valve from foreign bodies, dust, etc.
- It is recommended that a manual cut-off valve should be installed upstream of the solenoid valve. When the solenoid valve fails, it can be isolated in time and convenient for maintenance.
- If the opening and closing of the valve fails in use, check whether the coil is powered off; whether the power supply and medium pressure are normal.
- When the solenoid valve is not installed temporarily, it can be stored in the room where the ambient temperature is 0-40 °C and the relative humidity is less than 80%. Open-air storage is not allowed.
- Ensure that all functions of the system comply with valve specifications (gas type, working pressure, flow rate, ambient temperature, voltage, etc.).
- Maintenance cycle once a year, and increase the number of maintenance as appropriate, such as corrosive gases