

# AZQ Series

## Mini Integrated Vacuum Generator



### Features

- ◇ Multi-nozzle design
- ◇ Small size and light weight. The volume is 43.5cm<sup>3</sup>
- ◇ Centralized air supply
- ◇ No noise (vacuum pump type)
- ◇ With digital vacuum pressure switch

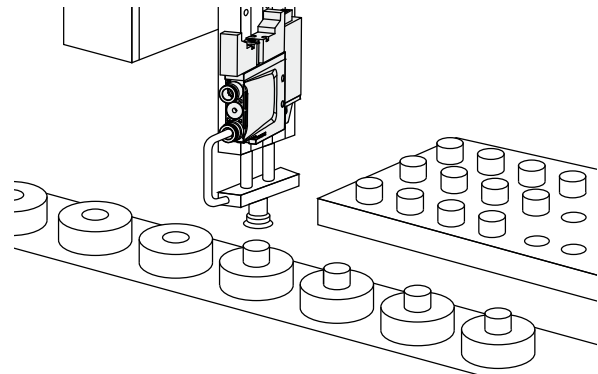
### Advantages

- ◇ The device is compact and can be installed directly in the handling system
- ◇ Simple installation, can be installed directly on the distribution box
- ◇ Vacuum pump type is suitable for centralized vacuum station system



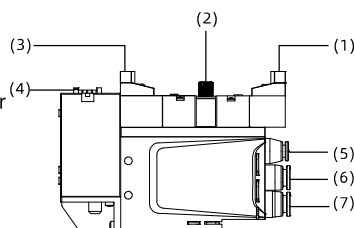
### Applications

- ◇ Vacuum producing and monitoring in automation systems
- ◇ For robot handling applications and linear axes
- ◇ Pick and place applications with very short time
- ◇ Used for systems that require high dynamic handling of workpieces and with limited space
- ◇ Usually used for handling small parts in fully automated systems



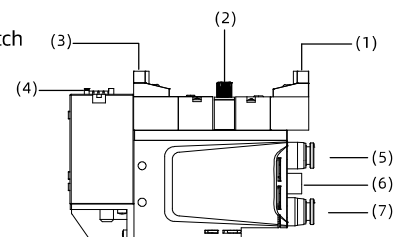
### Structure - Without vacuum source type (Vacuum pump type)

- ◇ (1) Vacuum release valve
- ◇ (2) Vacuum release adjusting valve
- ◇ (3) Vacuum supply valve
- ◇ (4) Vacuum pressure switch
- ◇ (5) Air supply port
- ◇ (6) Vacuum pump connector
- ◇ (7) Vacuum port



### With vacuum source type (Vacuum generator type)

- ◇ (1) Vacuum release valve
- ◇ (2) Vacuum release adjusting valve
- ◇ (3) Vacuum supply valve
- ◇ (4) Vacuum pressure switch
- ◇ (5) Air supply port
- ◇ (6) Exhaust port
- ◇ (7) Vacuum port





# AZQ Series

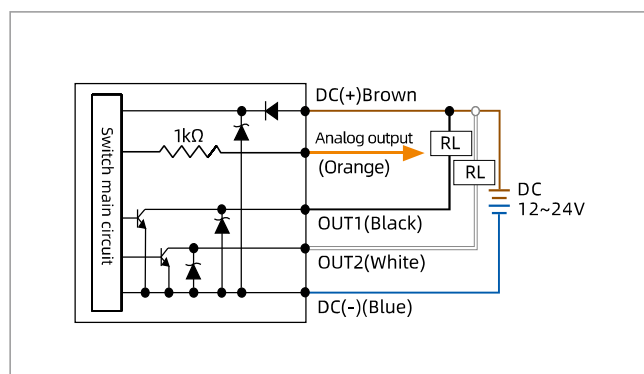
## Mini Integrated Vacuum Generator



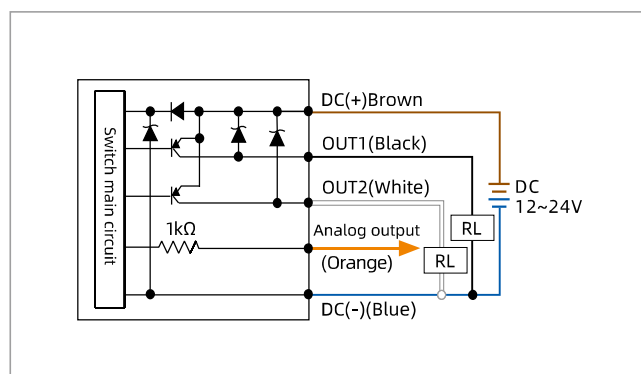
### Technical parameters - Pressure switch

Model	ZPDC-□
Pressure range	-100~100kPa
Setting pressure range	-105~105kPa
Proof pressure	500kPa
General gas	Air, Non-corrosive, non flammable gas
Power supply voltage	12-24V DC±10%, RIPPLE (P-P) 10% or less
Current consumption	≤40mA(Without load)
Switch output Output mode	2NPN or 2PNP open collector output+1~5V linear analog output
Max. load current	125mA
Max. supply voltage	30V DC (NPN) 24V DC (PNP)
Residual voltage	≤1.5V
Response time	≤2.5ms (chattering-proof function: 25ms, 100ms, 250ms, 500ms, 1000ms, 1500ms selectable)
Output short circuit protection	Yes
Repeatability	±0.2%F.S.±1 digit
Display	3½LED 7 segment display (Red) display (Sampling rate: 5 times/sec)
Indicator accuracy	±2% F.S. ±1 digit At ambient temperature: 25±3°C
Switch ON indicator	OUT1:Green/OUT2:Red
Environmental resistance IP Grade	IP40
Ambient temp.range	Operation: 0~50°C
Withstand voltage	1000VAC in 1minute (between case and lead wire)
Insulation resistance	50MΩ min. (at 500V DC, between case and lead wire)
Temperature characteristic	±2%F.S. (at temperature range of 0~50°C)
Lead wire	Oil proof PVC cable (0.15mm <sup>2</sup> )

### Output circuit wiring diagrams



ZPDC-N 2NPN+1 Analog voltage output (1-5V)



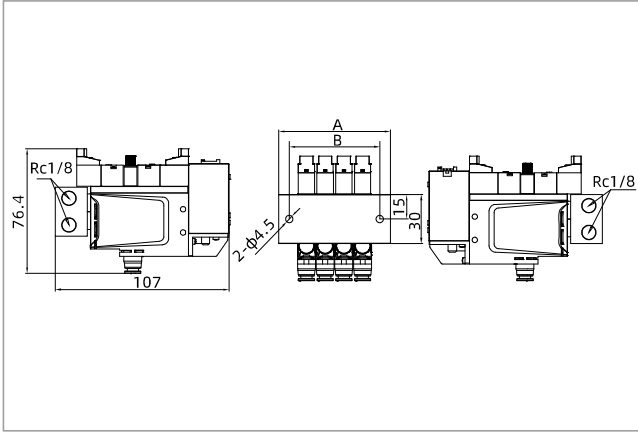
ZPDC-P 2PNP+1 Analog voltage output (1-5V)

# AZQ Series

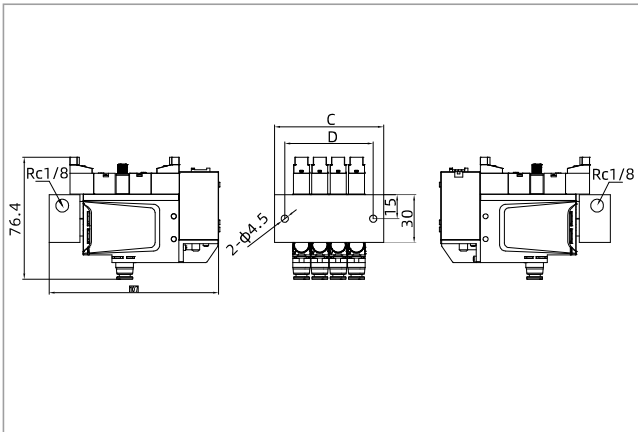
## Mini Integrated Vacuum Generator



### Centralized air supply dimensions(mm)



Vacuum pump type

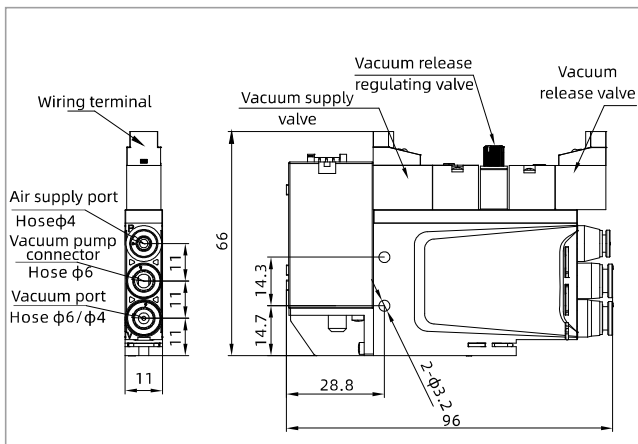


Vacuum generator type

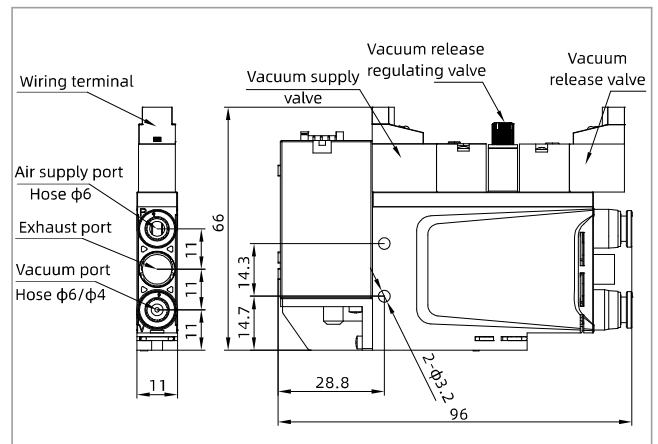
Stack	A	B	C	D
2	45.5	32.5	45.5	32.5
4	68.5	55.5	68.5	55.5
6	91.5	78.5	91.5	78.5
8	114.5	101.5	114.5	101.5
10	-	-	137.5	124.5

- ◇ Note: 1. AZQ-X/T/B dual integrated vacuum generator is a standard product, while using single piece with dual centralized gas supply, vacant port should be blocked  
 2. While using 5 pieces or more AZQ-B for integrating, recommend air supply on both sides

### Dimensions(mm)



AZQ-B-□ Single body of vacuum pump type



AZQ-□-□ Single body of vacuum generator type

Vacuum Generator

AZK

AZQ

AZX

AZD

AGS

AGP

AGX

AGE

ABM/ABX

ABM/ABX Combined Type

AMC

AM/ALAH

AM/AL Combined Type

AMD

AZW

AZR

ABT

ABP

ABQ

AEVC

AZL

ALH

AZH

AZU

ACV

ASBP

ALS

ACP

ACPF

ACPS

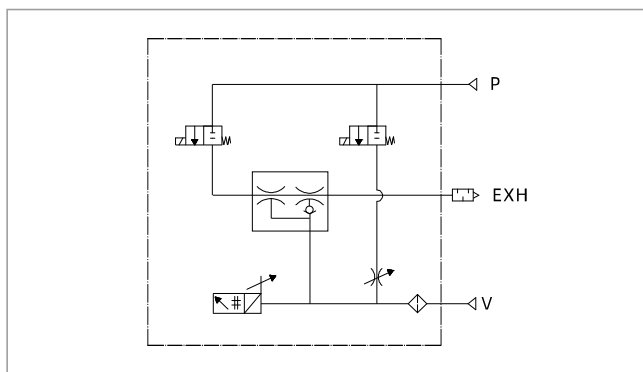
APB

# AZQ Series

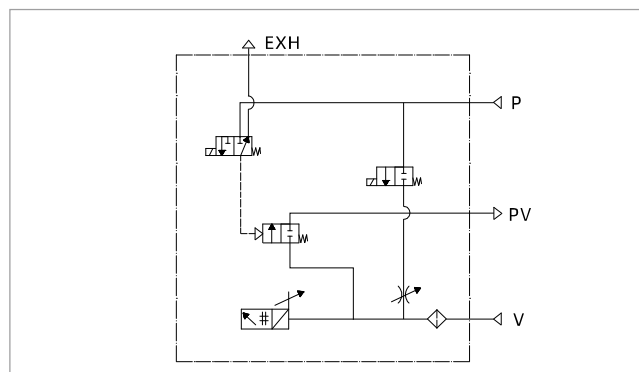
## Mini Integrated Vacuum Generator



### Air circuit schematic diagram



AZQ



AZQ-B

### Repair kits

Item	Model	Remark
Solenoid valve leadwire	AZK-N	Plug lead wire length 300mm
Solenoid valve leadwire	AZK-3M	Plug lead wire length 3000mm
Solenoid valve	AZQ-I23	Vacuum solenoid valve
Solenoid valve	AZK-F23	Blow-off solenoid valve
Pressure switch	ZPDC-N	NPN output pressure gauge
Pressure switch	ZPDC-NE	NE(NPN output) pressure gauge
Pressure switch	ZPDC-P	PNP output pressure gauge
Pressure switch	ZPDC-PE	PE(PNP output) pressure gauge
Pressure switch power cord	ZPDC-CB	Pressure switch 5 core wires