

# AM/AL/AH Series

## Multistage Vacuum Generator

**AIRBEST**



METAL SHEET



PACKAGING



WOOD



COMPOSITE MATERIAL

### Features

- ◇ Energy-efficient multistage nozzle design
- ◇ It has a very strong suction capacity
- ◇ A variety of specifications of air supply port and vacuum port
- ◇ Energy-saving system(ES) is optional

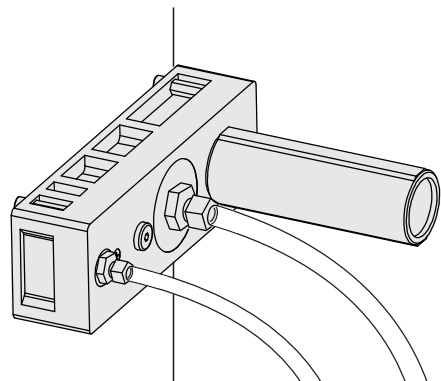
### Advantages

- ◇ Quick evacuation in low vacuum level range, reduce cost and shorten working cycle
- ◇ It can produce large vacuum flow, handle all porous workpieces fast and safely
- ◇ Different thread specifications can be used
- ◇ Save compressed air consumption when handling airtight workpieces



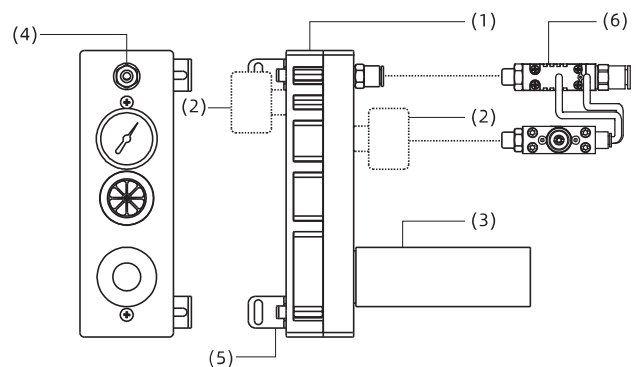
### Applications

- ◇ The multistage vacuum generator is suitable for handling cartons, packaging materials and porous materials
- ◇ Used for working conditions requiring large vacuum flow, fast evacuation and less air consumption



### Structure

- ◇ (1) The main body
- ◇ (2) Vacuum detecting port
- ◇ (3) Silencer
- ◇ (4) Air supply port
- ◇ (5) Mounting bracket
- ◇ (6) ES Energy-saving system



# AM/AL/AH Series

## Multistage Vacuum Generator



### How to order

## AM 25L - AD - N - A - ES

①      ②      ③      ④      ⑤      ⑥

① Series	② Specification	③ Connection plate	④ Sealing	⑤ Non-return valve	⑥ Control device
AM - Universal type (-92kPa)	25L 50L 75L 100L 125L 150L	D B	N - NBR E - EPDM	Nil - Default, without non-return valve A - With non-return valve	Nil - Default, without control device ES - Energy-saving system
AL - Large vacuum flow type (-81kPa)	25 50 75 100 125 150	AD E	F - Fluorine rubber		only for AM-25L/50L
AH - High vacuum level type (-100.8kPa)	40 120	(Refer to table1)			AL-25/50 AH-40

### Connection plate table1

Connection plate	Air supply port <sup>(1)</sup>	Vacuum port <sup>(2)</sup>	Exhaust port <sup>(3)</sup>	Connection plate material	Applicable vacuum generator
D	NPSF1/8	G3/4	G3/4	PPS	AM25-100、AL25-100、AH40-120
B	NPSF1/8	NPT3/4	NPT3/4	PPS	
AD	G1/4	G3/4	G3/4	Aluminum alloy	
E	NPT1/4	NPT3/4	NPT3/4	Aluminum alloy	
D	G1/4	G1"	G1"	PPS	AM125-150、AL125-150
B	NPT1/4	NPT1"	NPT1"	PPS	
AD	G1/4	G1"	G1"	Aluminum alloy	
E	NPT1/4	NPT1"	NPT1"	Aluminum alloy	

### Selection - AM series

Model/ Specification	25L	50L	75L	100L	125L	150L
AM□-D-N	AM25L-D-N	AM50L-D-N	AM75L-D-N	AM100L-D-N	AM125L-D-N	AM150L-D-N
AM□-D-N-A	AM25L-D-N-A	AM50L-D-N-A	AM75L-D-N-A	AM100L-D-N-A	AM125L-D-N-A	AM150L-D-N-A
AM□-D-N-A-ES	AM25L-D-N-A-ES	AM50L-D-N-A-ES	-	-	-	-
AM□-B-N	AM25L-B-N	AM50L-B-N	AM75L-B-N	AM100L-B-N	AM125L-B-N	AM150L-B-N
AM□-B-N-A	AM25L-B-N-A	AM50L-B-N-A	AM75L-B-N-A	AM100L-B-N-A	AM125L-B-N-A	AM150L-B-N-A
AM□-AD-N	AM25L-AD-N	AM50L-AD-N	AM75L-AD-N	AM100L-AD-N	AM125L-AD-N	AM150L-AD-N
AM□-AD-N-A	AM25L-AD-N-A	AM50L-AD-N-A	AM75L-AD-N-A	AM100L-AD-N-A	AM125L-AD-N-A	AM150L-AD-N-A
AM□-AD-N-A-ES	AM25L-AD-N-A-ES	AM50L-AD-N-A-ES	-	-	-	-
AM□-E-N	AM25L-E-N	AM50L-E-N	AM75L-E-N	AM100L-E-N	AM125L-E-N	AM150L-E-N
AM□-E-N-A	AM25L-E-N-A	AM50L-E-N-A	AM75L-E-N-A	AM100L-E-N-A	AM125L-E-N-A	AM150L-E-N-A

Vacuum Generator

AZK

AZX

AZD

AGS

AGB

AGP

AGX

AGE

ABM/ABX

ABM/ABX  
Combined Type

AMC

AM/AL/AH

AM/AL  
Combined Type

AMD

AZW

AZR

ABT

ABP

ABQ

AEVC

AZL

AZH

AZU

ACV

ASBP

ALS

ACP

ACPF

ACPS

APB

# AM/AL/AH Series

## Multistage Vacuum Generator



### Selection - AL series

Model/ Specification	25	50	75	100	125	150
AL□-D-N	AL25-D-N	AL50-D-N	AL75-D-N	AL100-D-N	AL125-D-N	AL150-D-N
AL□-D-N-A	AL25-D-N-A	AL50-D-N-A	AL75-D-N-A	AL100-D-N-A	AL125-D-N-A	AL150-D-N-A
AL□-D-N-A-ES	AL25-D-N-A-ES	AL50-D-N-A-ES	-	-	-	-
AL□-B-N	AL25-B-N	AL50-B-N	AL75-B-N	AL100-B-N	AL125-B-N	AL150-B-N
AL□-B-N-A	AL25-B-N-A	AL50-B-N-A	AL75-B-N-A	AL100-B-N-A	AL125-B-N-A	AL150-B-N-A
AL□-AD-N	AL25-AD-N	AL50-AD-N	AL75-AD-N	AL100-AD-N	AL125-AD-N	AL150-AD-N
AL□-AD-N-A	AL25-AD-N-A	AL50-AD-N-A	AL75-AD-N-A	AL100-AD-N-A	AL125-AD-N-A	AL150-AD-N-A
AL□-AD-N-A-ES	AL25-AD-N-A-ES	AL50-AD-N-A-ES	-	-	-	-
AL□-E-N	AL25-E-N	AL50-E-N	AL75-E-N	AL100-E-N	AL125-E-N	AL150-E-N
AL□-E-N-A	AL25-E-N-A	AL50-E-N-A	AL75-E-N-A	AL100-E-N-A	AL125-E-N-A	AL150-E-N-A

### Selection - AH series

Model/ Specification	40	120
AH□-D-N	AH40-D-N	AH120-D-N
AH□-D-N-A	AH40-D-N-A	AH120-D-N-A
AH□-D-N-A-ES	AH40-D-N-A-ES	-
AH□-B-N	AH40-B-N	AH120-B-N
AH□-B-N-A	AH40-B-N-A	AH120-B-N-A
AH□-AD-N	AH40-AD-N	AH120-AD-N
AH□-AD-N-A	AH40-AD-N-A	AH120-AD-N-A
AH□-AD-N-A-ES	AH40-AD-N-A-ES	-
AH□-E-N	AH40-E-N	AH120-E-N
AH□-E-N-A	AH40-E-N-A	AH120-E-N-A

### Technical parameters

Model	Rated air supply pressure bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Air consumption NL/min	Noise level dB(A)	Working temperature °C	Weight g	Recommended hose dia. mm	
								(Hose outer dia.) Air supply port	(Wired hose inner dia.) Vacuum port
AL25	6.0	81	360	105	81	-10~80	675	φ8	φ19
AL50	6.0	81	640	215	81	-10~80	675	φ10	φ19
AL75	6.0	81	850	320	81	-10~80	837	φ10	φ25
AL100	6.0	81	990	390	82	-10~80	837	φ10	φ25
AL125	6.0	81	1,170	480	82	-10~80	1,075	φ12	φ32
AL150	6.0	81	1,230	620	81	-10~80	1,075	φ12	φ32
AH40	6.0	99.8	150	155	81	-10~80	675	φ10	φ19
AH120	6.0	100.8	530	440	81	-10~80	837	φ12	φ19

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## Multistage Vacuum Generator

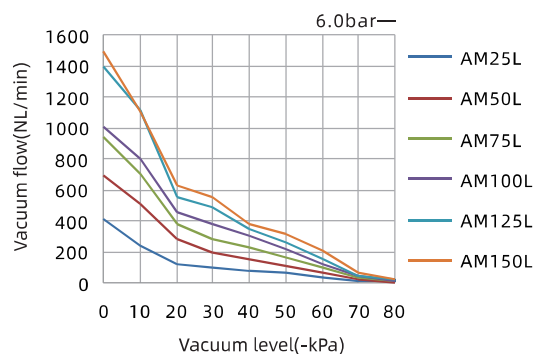
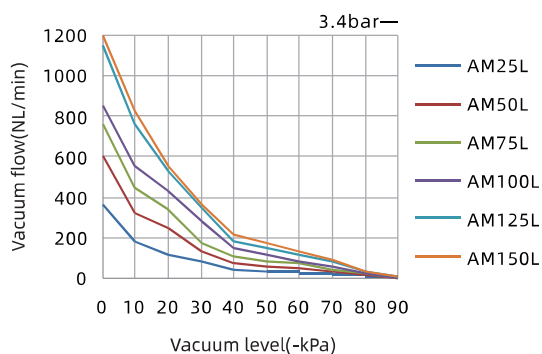


### Technical parameters

Model	Rated air supply pressure bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Air consumption NL/min	Noise level dB(A)	Working temperature °C	Weight g	Recommended hose dia. mm (Hose outer dia.) (Wired hose inner dia.)	Air supply port	Vacuum port
AM25L	3.4	92	360	116	80	-10~80	675	φ8		φ19
AM50L	3.4	92	600	230	81	-10~80	675	φ8		φ19
AM75L	3.4	92	760	365	81	-10~80	837	φ10		φ25
AM100L	3.4	92	850	445	81	-10~80	837	φ10		φ25
AM125L	3.4	92	1,150	545	82	-10~80	1,075	φ12		φ32
AM150L	3.4	92	1,200	655	82	-10~80	1,075	φ12		φ32
AM25L	6.0	89	420	185	80	-10~80	675	φ8		φ19
AM50L	6.0	89	700	370	81	-10~80	675	φ8		φ19
AM75L	6.0	89	950	610	81	-10~80	837	φ10		φ25
AM100L	6.0	89	1,010	720	81	-10~80	837	φ10		φ25
AM125L	6.0	89	1,400	780	82	-10~80	1,075	φ12		φ32
AM150L	6.0	89	1,500	810	82	-10~80	1,075	φ12		φ32

### Vacuum flow(NL/min) at different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	90	Max. vacuum level -kPa
AM25L	3.4	116	360	180	115	80	43	30	22.5	15.5	7.5	21.2	92
AM50L	3.4	230	600	320	250	135	75	60	46	30	13	1.5	92
AM75L	3.4	365	760	445	340	175	110	85	70	43	20	1.8	92
AM100L	3.4	445	850	550	430	280	145	115	85	60	28	2.2	92
AM125L	3.4	545	1,150	760	530	350	180	148	115	78	34.5	3.5	92
AM150L	3.4	655	1,200	830	550	360	215	170	130	90	36	5	92
AM25L	6.0	185	420	240	125	100	82	65	38	12.5	3.5	-	89
AM50L	6.0	370	700	510	290	195	160	115	70	22	8	-	89
AM75L	6.0	610	950	710	380	285	230	170	100	32	11	-	89
AM100L	6.0	720	1,010	800	460	385	310	215	125	42	15.5	-	89
AM125L	6.0	780	1,400	1,120	560	490	355	260	150	50	25	-	89
AM150L	6.0	810	1,500	1,110	630	560	385	315	210	65	26	-	89



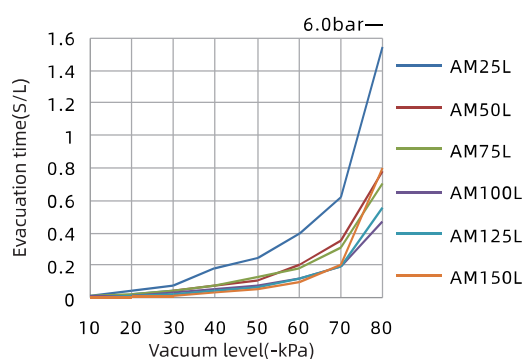
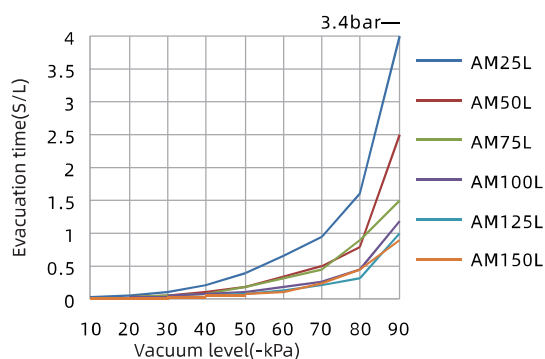
# AM/AL/AH Series

## Multistage Vacuum Generator



### Evacuation time(s/L) to reach different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	90	Max. vacuum level -kPa
AM25L	3.4	116	0.022	0.060	0.110	0.210	0.400	0.650	0.950	1.600	4.000	92
AM50L	3.4	230	0.014	0.031	0.060	0.100	0.200	0.340	0.500	0.800	2.500	92
AM75L	3.4	365	0.012	0.029	0.058	0.095	0.180	0.310	0.460	0.890	1.500	92
AM100L	3.4	445	0.010	0.025	0.043	0.075	0.110	0.190	0.270	0.450	1.200	92
AM125L	3.4	545	0.006	0.015	0.029	0.052	0.085	0.145	0.202	0.330	1.00	92
AM150L	3.4	655	0.005	0.013	0.027	0.045	0.070	0.105	0.230	0.460	0.900	92
AM25L	6.0	185	0.018	0.050	0.080	0.18	0.250	0.400	0.620	1.550	-	89
AM50L	6.0	370	0.010	0.022	0.048	0.080	0.110	0.200	0.350	0.780	-	89
AM75L	6.0	610	0.009	0.019	0.045	0.075	0.130	0.180	0.310	0.700	-	89
AM100L	6.0	720	0.007	0.018	0.038	0.055	0.080	0.120	0.190	0.470	-	89
AM125L	6.0	780	0.005	0.013	0.026	0.045	0.062	0.115	0.194	0.560	-	89
AM150L	6.0	810	0.003	0.009	0.014	0.03	0.060	0.095	0.200	0.800	-	89



### Vacuum flow(NL/min) at different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	Max. vacuum level -kPa
AL25	6.0	105	360	196	135	85	45	36	27	17	81
AL50	6.0	215	640	320	205	145	95	65	45	25	81
AL75	6.0	320	850	430	320	190	130	105	65	40	81
AL100	6.0	390	990	580	460	300	185	130	95	52	81
AL125	6.0	480	1,170	720	541	350	200	150	125	65	81
AL150	6.0	620	1,230	760	560	410	210	160	148	85	81

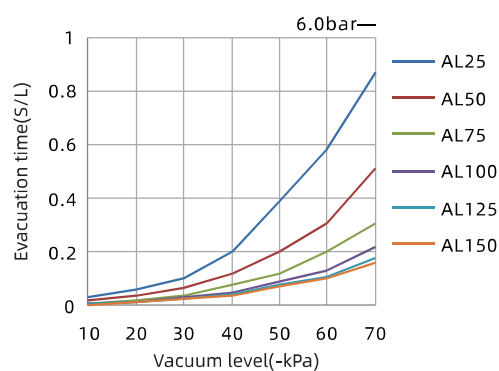
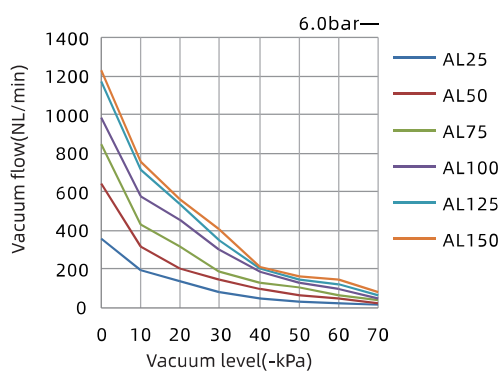
# AM/AL/AH Series

## Multistage Vacuum Generator



### Evacuation time(s/L) to reach different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	Max. vacuum level -kPa
AL25	6.0	105	0.030	0.060	0.100	0.200	0.390	0.580	0.870	81
AL50	6.0	215	0.018	0.039	0.066	0.120	0.200	0.310	0.510	81
AL75	6.0	320	0.010	0.020	0.040	0.080	0.120	0.200	0.310	81
AL100	6.0	390	0.008	0.017	0.032	0.050	0.090	0.130	0.220	81
AL125	6.0	480	0.006	0.016	0.026	0.045	0.078	0.110	0.180	81
AL150	6.0	620	0.005	0.014	0.024	0.040	0.071	0.100	0.160	81

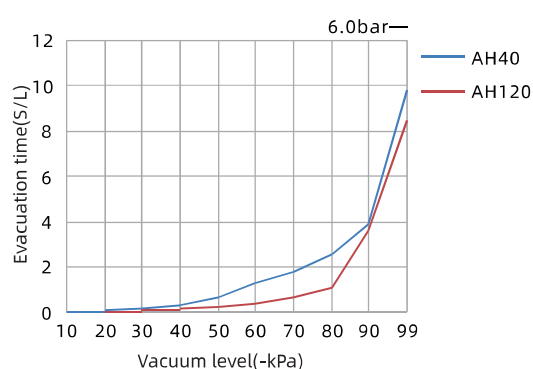
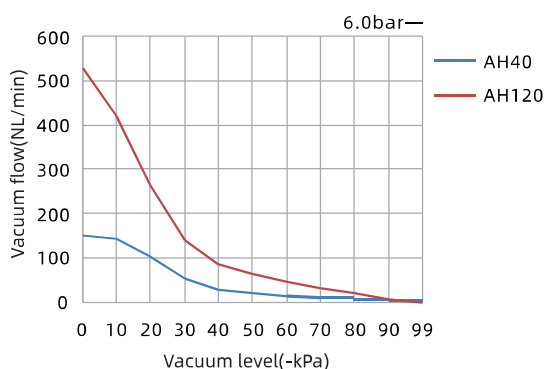


### Vacuum flow(NL/min) at different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	90	99	Max. vacuum level -kPa
AH40	6.0	155	150	145	105	52.5	27.5	20.5	15.0	8.5	5.5	3.0	0.2	99.8
AH120	6.0	440	530	420	265	141.0	85.0	65.0	45.0	33.0	21.5	6.0	0.5	100.8

### Evacuation time(s/L) to reach different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	90	99	Max. vacuum level -kPa
AH40	6.0	155	0.04	0.08	0.18	0.32	0.64	1.30	1.80	2.60	3.90	9.8	99.8
AH120	6.0	440	0.02	0.04	0.08	0.14	0.25	0.38	0.66	1.08	3.60	8.5	100.8



Vacuum Generator

AZK

AZX

AZD

AGS

AGB

AGP

AGX

AGE

ABM/ABX

ABM/ABX Combined Type

AMC

AM/AL/AH

AM/AL Combined Type

AMD

AZW

AZR

ABT

ABP

ABQ

AEVC

AZL

AZH

AZU

ACV

ASBP

ALS

ACP

ACPF

ACPS

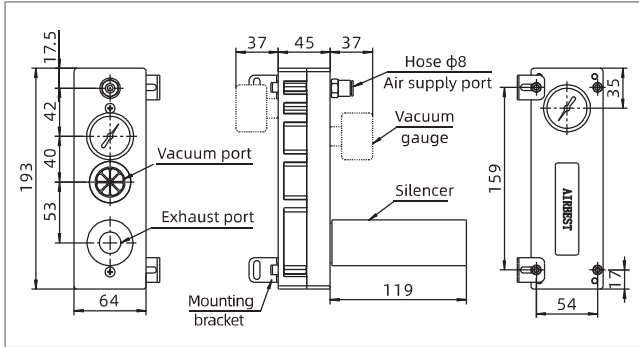
APB

# AM/AL/AH Series

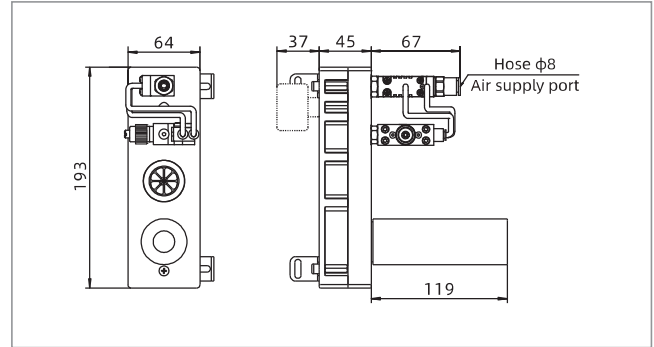
## Multistage Vacuum Generator



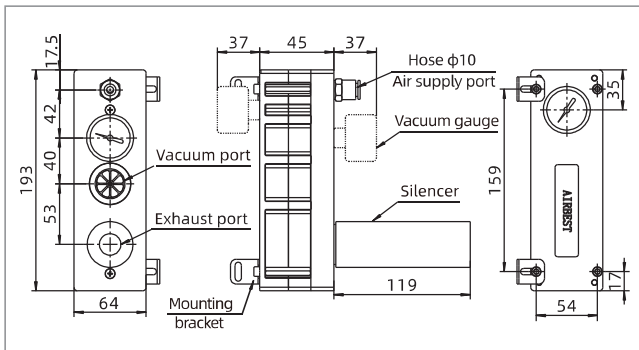
### Dimensions(mm)



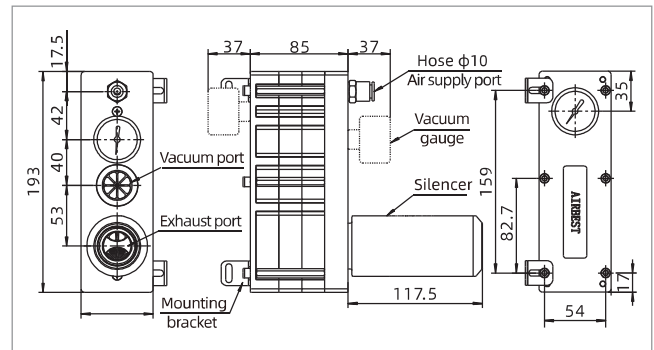
AM/AL25-50 AH40



AM/AL25-50-□-N-A-ES



AM/AL75-100



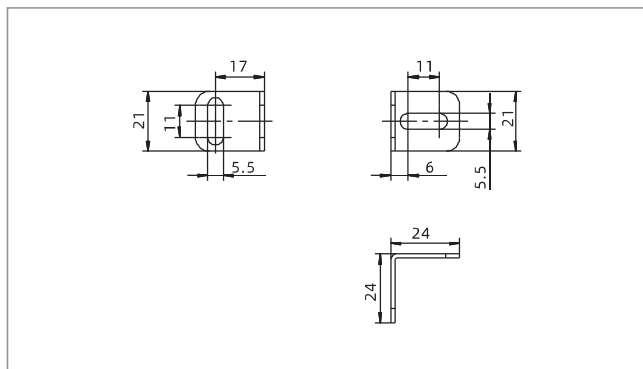
AM/AL125-150

# AM/AL/AH Series

## Multistage Vacuum Generator

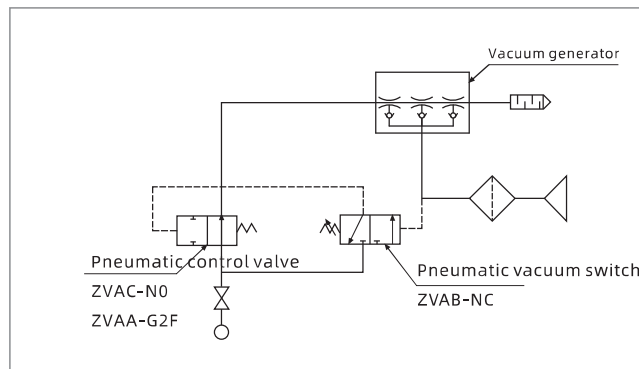


### Dimensions(mm)



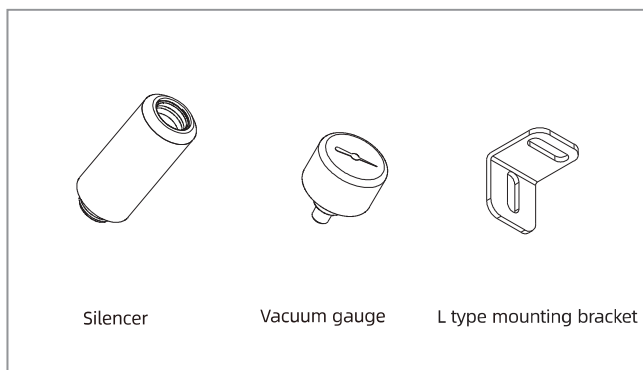
L type mounting bracket

### Air circuit schematic diagram

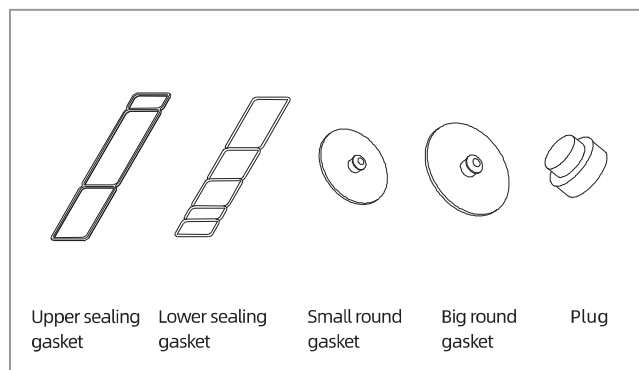


ES Energy-saving system

### Accessories



Mounting accessories



Repair kits-Sealing kits

Item	Model	Applicable vacuum generator
Silencer	ZSA-G6M	AM25-50, AL25-50, AH40
Vacuum gauge	ZPMR-V	AM25-50, AL25-50, AH40
Sealing kits	AM50L-PK (1 Upper sealing gasket+1 Lower sealing gasket+2 Small round gaskets+2 Plugs)	AM25-50, AL25-50, AH40
Mounting accessory kit	AM50L-D (2 brackets+4 screws+1 G1/8 φ8 one-touch fitting)	AM25-50, AL25-50, AH40
Mounting accessory kit	AM50L-E (2 brackets+4 screws+1 G1/4 φ8 one-touch fitting)	AM25-50, AL25-50, AH40
Silencer	ZSA-G6M	AM75-100, AL75-100, AH120
Vacuum gauge	ZPMR-V	AM75-100, AL75-100, AH120
Sealing kits	AM100L-PK (1 Upper sealing gasket+2 Lower sealing gaskets+2 Small round gaskets+4 Plugs)	AM75-100, AH120
Sealing kits	AL100-PK (1 Upper sealing gasket+2 Lower sealing gaskets+1 Small round gasket+1 Big round gasket+ 4 Plugs)	AL75-100
Mounting accessory kit	AM100L-D (2 brackets+4 screws+1 G1/8 φ10 one-touch fitting)	AM75-100, AL75-100, AH120
Mounting accessory kit	AM100L-E (2 brackets+4 screws+1 G1/4 φ10 one-touch fitting)	AM75-100, AL75-100, AH120
Silencer	ZSA-G8M	AM125-150, AL125-150
Vacuum gauge	ZPMR-V	AM125-150, AL125-150
Sealing kits	AM150L-PK (1 Upper sealing gasket+3 Lower sealing gaskets+1 Small round gasket+1 Big round gasket+6 Plugs)	AM125-150, AL125-150
Mounting accessory kit	AM150L (2 brackets+4 screws+1 G1/4 φ12 one-touch fitting)	AM125-150, AL125-150

◇ Note:The mounting accessory kit includes 2 L-type brackets and 4 screws for the connection plate B and E

Vacuum Generator

AZK

AZX

AZD

AGS

AGB

AGP

AGX

AGE

ABM/ABX

ABM/ABX  
Combined Type

AMC

AM/AL/AH

AM/AL  
Combined Type

AMD

AZW

AZR

ABT

ABP

ABQ

AEVC

AZL

AZH

AZU

ACV

ASBP

ALS

ACP

ACPF

ACPS

APB