

AM/AL/AH Series

Multistage Vacuum Generator

AIRBEST

RoHS



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

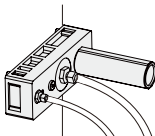
Advantages

- ◇ 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



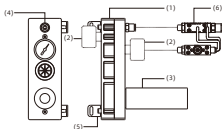
Applications

- ◇ 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



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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	25L 50L 75L	D	N - NBR	Nil - Default, without non-return valve	Nil - Default, without control device
(-92kPa)	100L 125L 150L	B	E - EPDM	A - With non-return valve	
AL - Large vacuum flow type	25 50 75	AD	F - Fluorine rubber		PVD - Supply valve
(-81kPa)	100 125 150	E			+ Break valve
AH - High vacuum level type	40 120	(Refer to table1)			ES - Energy-saving system only for AM-25L/50L
(-100.8kPa)					AL-25/50
					AH-40

Connection plate table1

Connection plate	Air supply port (1)	Vacuum port (2)	Exhaust port (3)	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
AM□-E-N-PVD	AM25L-E-N-PVD	AM50L-E-N-PVD	AM75L-E-N-PVD	AM100L-E-N-PVD	AM125L-E-N-PVD	AM150L-E-N-PVD

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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
AL□-E-N-PVD	AL25-E-N-PVD	AL50-E-N-PVD	AL75-E-N-PVD	AL100-E-N-PVD	AL125-E-N-PVD	AL150-E-N-PVD

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
AH□-E-N-PVD	AH40-E-N-PVD	AH120-E-N-PVD

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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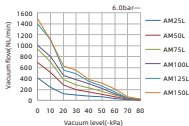
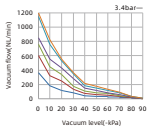
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Technical parameters

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.)	Recommended hose dia. mm (Wired hose inner dia.)
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



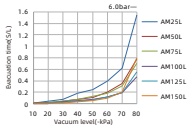
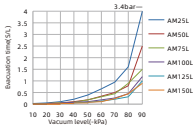
AM/AL/AH Series

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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	0.118	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

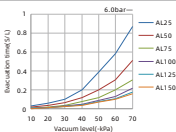
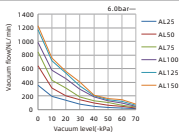
AM/AL/AH Series

Multistage Vacuum Generator

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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

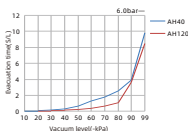
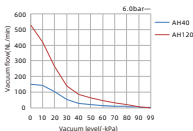


Vacuum flow(NL/min) at different vacuum levels(-kPa)

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

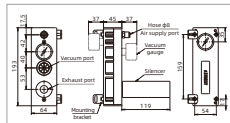


AM/AL/AH Series

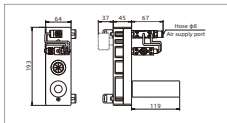
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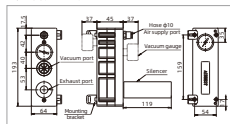
Dimensions(mm)



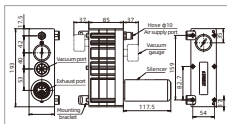
AM/AL25-50 AH40



AM/AL25-50 □-N-A-ES



AM/AL75-100



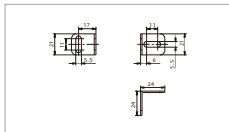
AM/AL125-150

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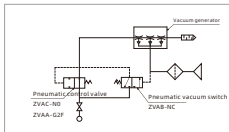
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Dimensions(mm)



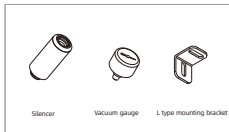
L type mounting bracket

Air circuit schematic diagram

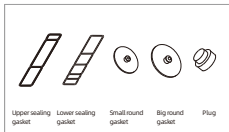


ES Energy-saving system

Accessories



Mounting accessories



Repair kits-Sealing kits

Item	Model	Applicable vacuum generator
Silencer	ZSA-G6M	AM05-50, AL25-50, AH40
Vacuum gauge	ZMR-V	AM05-50, AL25-50, AH40
Sealing kits	AM50L-PK (1 Upper sealing gasket+2 Lower sealing gaskets+2 Small round gaskets+2 Plugs)	AM05-50, AL25-50, AH40
Mounting accessory kit	AM50L-D-R (2 brackets+4 screws+1 G1/8 φ8 one-touch fitting)	AM05-50, AL25-50, AH40
Mounting accessory kit	AM50L-E-R (2 brackets+4 screws+1 G1/4 φ8 one-touch fitting)	AM05-50, AL25-50, AH40
Silencer	ZSA-G6M	AM05-100, AL75-100, AH120
Vacuum gauge	ZMR-V	AM05-100, AL75-100, AH120
Sealing kits	AM100L-PK (1 Upper sealing gasket+2 Lower sealing gaskets+2 Small round gaskets+4 Plugs)	AM05-100, 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-R (2 brackets+4 screws+1 G1/8 φ10 one-touch fitting)	AM05-100, AL75-100, AH120
Mounting accessory kit	AM100L-E-R (2 brackets+4 screws+1 G1/4 φ10 one-touch fitting)	AM05-100, AL75-100, AH120
Silencer	ZSA-G8M	AM125-150, AL125-150
Vacuum gauge	ZMR-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-R (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