

ABM/ABX Series

Mini Vacuum Pump



ABM/ABX

ABM/ABX
Combined type

ASM/ASX

ASM/ASX
Combined type

AM/AL/AH

AM/AL/AH
Combined type

AZL

ACP

ACPF

ACPS

ACV

AQV

AZH

AZU

ASBP

Features

- ◇ Compact, light weight and easy to install. It can be directly connected to the suction cup.
- ◇ Multistage vacuum pump offers large vacuum flow.
- ◇ It can be used in most harmful gases.
- ◇ It can be operated with a single pneumatic control valve, and each vacuum circuit can be controlled by a single ABM/ABX without affecting the operation of other lines.
- ◇ Vacuum filter ZFL for it is available.

Applications

- ◇ Suitable for occasions where vacuum is required for each station in fast operation.
- ◇ Handling of electronic components and small parts.
- ◇ Various specifications to meet different operation requirements.

How to order

ABM 10 - B - F L

① ② ③ ④ ⑤

① Series	② Specification	③ Port connection	④ Sealing	⑤ Vacuum filter
ABM - Universal type (-85kPa)	5	A B C	Nil - Standard, NBR	Nil - Standard, without filter
	10	NA BA NC	F - Fluorine rubber	L - With ZFL10 vacuum filter
ABX - High vacuum level type (-92kPa)	20	NB	E - EPDM	
	30	NBA (Refer to table ①)		

Port connection table ①

Port connection	Air supply port	Vacuum port	Exhaust port
A	M5-φ6	G1/8	Internal silencer
NA	M5-φ6	NPSF1/8	Internal silencer
B	G1/8	G3/8	Internal silencer
BA	G1/8	G3/8	Internal silencer (Connection plate- AL)
NB	NPSF1/8	NPSF3/8	Internal silencer
NBA	NPSF1/8	NPSF3/8	Internal silencer (Connection plate- AL)
C	G1/8	G3/8	External silencer
NC	NPSF1/8	NPSF3/8	External silencer

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Selection

Model/Port connection	A	NA	B	BA	NB	NBA	C	NC
ABM (X) 5	●	○	●	○	○	○	●	○
ABM (X) 10	●	○	●	○	○	○	●	○
ABM (X) 20	—	—	●	○	○	○	●	○
ABM (X) 30	—	—	●	○	○	○	●	○

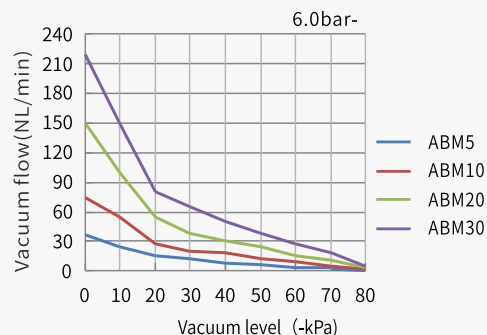
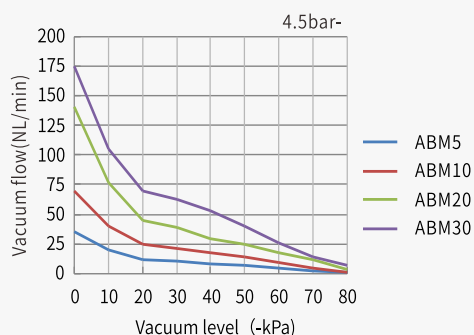
◇Note: "●"- standard, in stock. "○"-selective,no stock. "—"-unavailable.

Technical parameters

Model	Air supply pressure(bar)	Max. vacuum level (-kPa)	Max. Vacuum flow (NL/min)	Air consumption (NL/min)	Noise level dB(A)	Recommended hose dia. (mm)	
						Air supply (P)	Vacuum (V)
ABM5	4.5 - 6.0	85	35 - 37	12 - 20	50 - 65	6	8
ABM10	4.5 - 6.0	85	70 - 75	28 - 42	55 - 68	6	10
ABM20	4.5 - 6.0	85	141 - 150	55 - 85	60 - 68	8	12
ABM30	4.5 - 6.0	85	175 - 220	87 - 125	60 - 68	10	12
ABX5	4.5 - 6.0	92	30 - 32	18 - 22	50 - 65	6	8
ABX10	4.5 - 6.0	92	52 - 63	31 - 40	55 - 68	6	10
ABX20	4.5 - 6.0	92	100 - 125	79 - 89	60 - 69	8	12
ABX30	5.0 - 6.0	92	180 - 185	128 - 137	60 - 69	10	12

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

Model	Air supply pressure(bar)	Air consumption (NL/min)	Vacuum level (-kPa)										Max. vacuum level (-kPa)
			0	10	20	30	40	50	60	70	80		
ABM5	4.5	12	35	20.5	12	10.5	8.5	6.5	4.5	2.5	0.8	85	
ABM10	4.5	28	70	40.5	25	21	18	14	9.5	5	1.3		
ABM20	4.5	55	141	77	45	39.5	29.5	25	17.5	12	3		
ABM30	5.0	87	175	105	70	63	53	40	26	14	6.5		
ABM5	6.0	20	37	25	15.5	12	8	6	4	2.7	0.6	85	
ABM10	6.0	42	75	55	27	20	18	12	9	5	2		
ABM20	6.0	85	150	100	55	38	30	24	16	11	3.2		
ABM30	6.0	125	220	150	81	65	50	38	27	18	5		

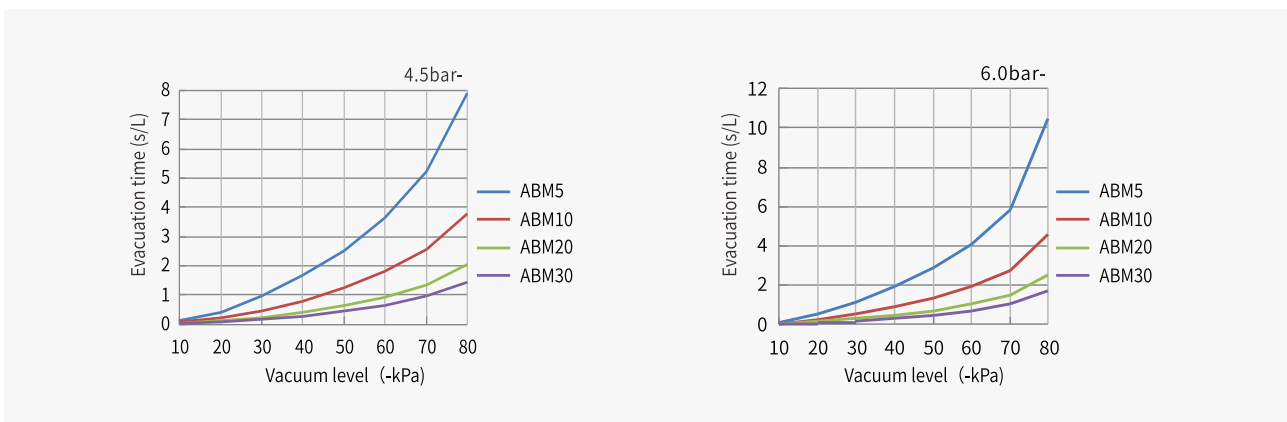


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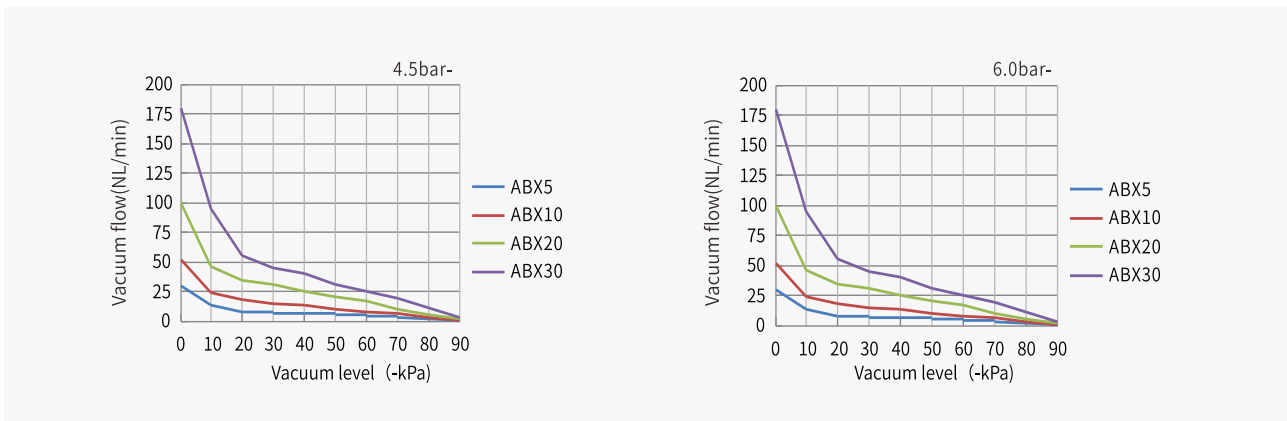
Evacuation time (s/L) to reach different vacuum levels (-kPa)

Model	Air supply pressure (bar)	Air consumption (NL/min)	10	20	30	40	50	60	70	80	Max. vacuum level (-kPa)
ABM5	4.5	12	0.11	0.42	0.95	1.66	2.5	3.65	5.25	7.89	85
ABM10	4.5	28	0.08	0.2	0.44	0.8	1.24	1.8	2.55	3.8	
ABM20	4.5	55	0.04	0.12	0.23	0.41	0.65	0.93	1.33	2.03	
ABM30	4.5	87	0.03	0.09	0.16	0.27	0.43	0.66	0.95	1.43	
ABM5	6.0	20	0.13	0.51	1.15	1.93	2.87	4.09	5.84	10.46	85
ABM10	6.0	42	0.03	0.23	0.53	0.92	1.37	1.95	2.77	4.62	
ABM20	6.0	85	0.02	0.15	0.28	0.46	0.71	1.02	1.48	2.55	
ABM30	6.0	125	0.02	0.08	0.14	0.31	0.49	0.69	1.02	1.75	



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)
ABX5	4.5	18	30	13	7.5	7	6	5	4	3.2	1.8	0.4	92
ABX10	4.5	31	52	24	18	15	13	10.5	8	6	2.5	0.8	
ABX20	4.5	79	100	46	34	30.5	25	21	17	10.5	5	1.6	
ABX30	5.0	128	180	95	55	45.5	40.5	30.5	25	19	11.5	3	
ABX5	6.0	22	32	20	8.5	7.5	6	5	4	3	1.5	0.15	92
ABX10	6.0	40	63	36	18	16	12.5	10.5	8.5	6	3.5	0.5	
ABX20	6.0	89	125	73	35	30	25	22	18	12	7	0.9	
ABX30	6.0	137	185	103	51	46	38	31	25	19	12	1.8	



Vacuum Pump

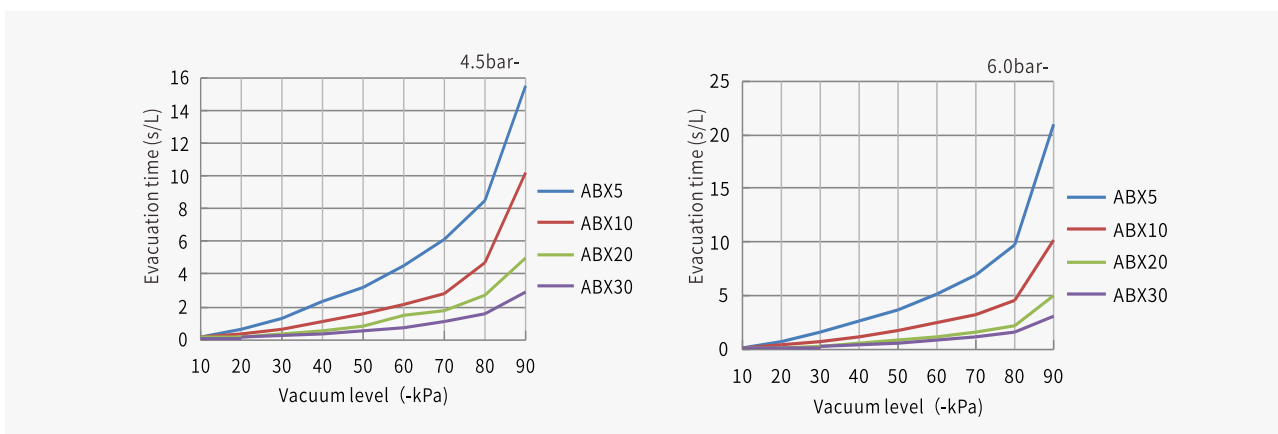
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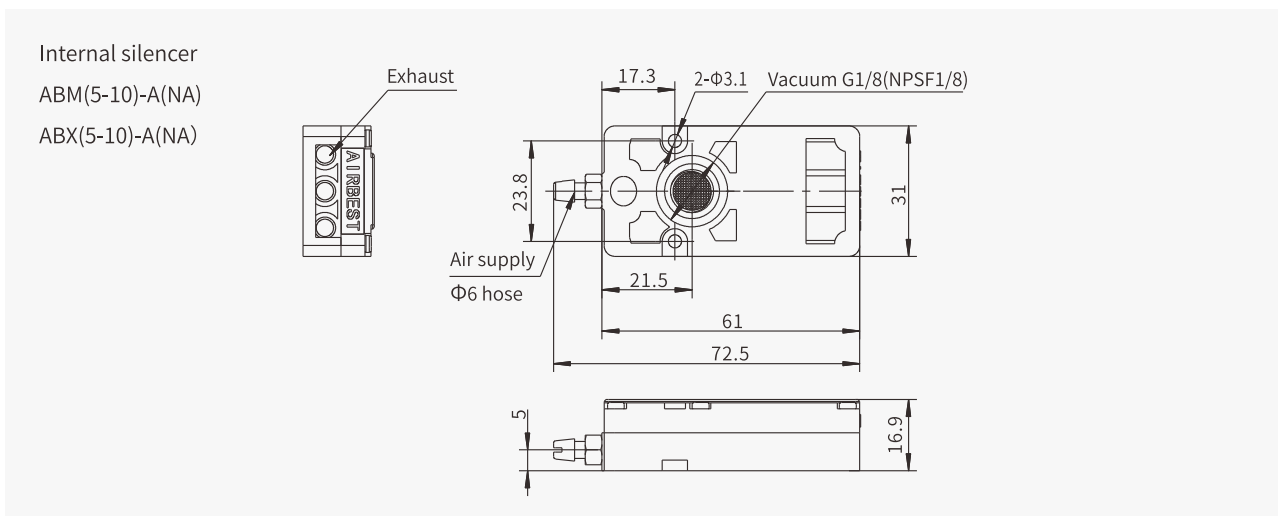
Mini Vacuum Pump

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)
ABX5	4.5	18	0.13	0.6	1.26	2.3	3.2	4.5	6.15	8.5	15.5	92
ABX10	4.5	31	0.11	0.3	0.65	1.1	1.55	2.15	2.85	4.7	10.2	
ABX20	4.5	79	0.09	0.16	0.32	0.55	0.8	1.5	1.8	2.7	5	
ABX30	5.0	128	0.06	0.12	0.23	0.36	0.53	0.76	1.1	1.6	2.9	
ABX5	6.0	22	0.15	0.71	1.52	2.54	3.72	5.12	6.95	9.70	21	93
ABX10	6.0	40	0.09	0.32	0.71	1.18	1.74	2.4	3.26	4.55	10.2	
ABX20	6.0	89	0.05	0.15	0.31	0.52	0.77	1.08	1.54	2.15	4.92	
ABX30	6.0	137	0.03	0.13	0.23	0.38	0.58	0.82	1.11	1.54	3	



Dimensions (mm)



Model	Specification	Port connection	Weight (g)
ABM	5	A(NA)	32.5(35.2)
ABX	10		32(32)

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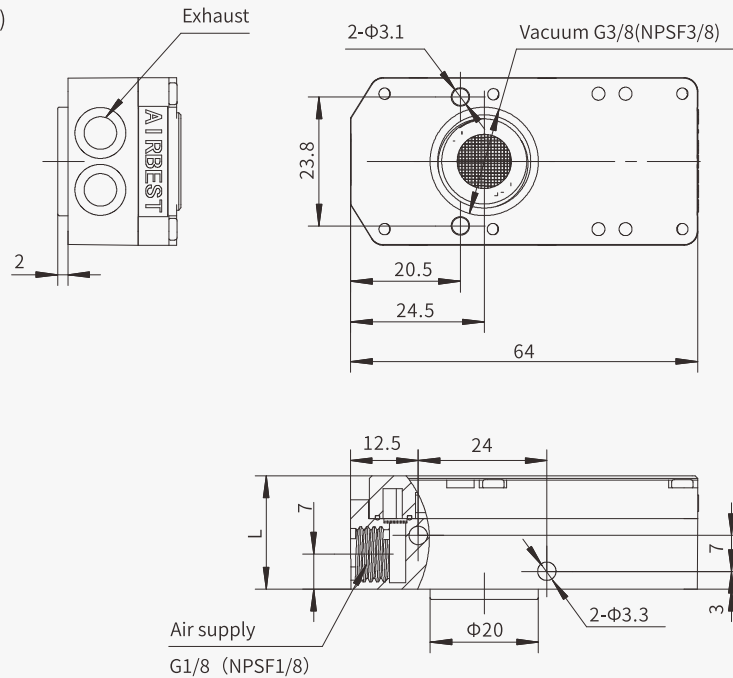
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Dimensions (mm)

Internal silencer

ABM(5-30)-B(BA/NB/NBA)

ABX(5-30)-B(NB/NB/NBA)



Model	Specification	Port connection	L	Weight (g)
ABM	5	B (BA, NB, NBA)	20.7	38(58, 38, 58)
ABX	10		20.7	37.5(57.5, 37.5, 57.5)
	20		28	50(70, 50, 70)
	30		35	62.5(82.5, 62.5, 82.5)

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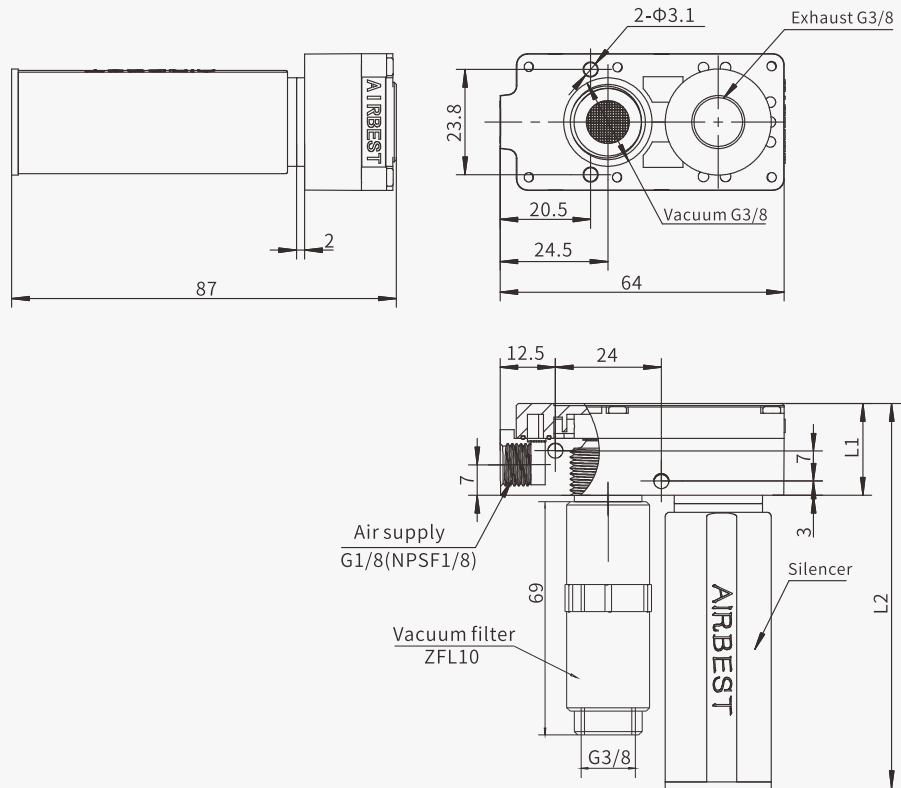
ASBP

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Dimensions (mm)

External silencer
 ABM(5-30)-C(NC)
 ABX(5-30)-C(NC)



Model	Specification	Port connection	L1	L2	Weight (g)
ABM	5	C(NC)	20.7	87	38
ABX	10		20.7	87	37.5
	20		28	94.2	50
	30		35	101.5	62.5

◇ Note: The above weight excludes vacuum filter ZFL10 (13g/pcs)

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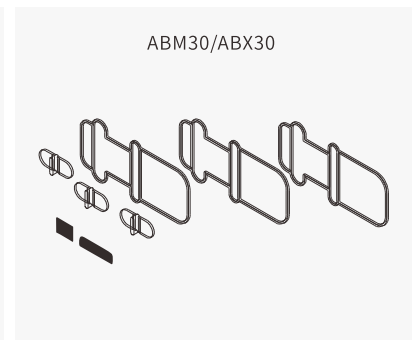
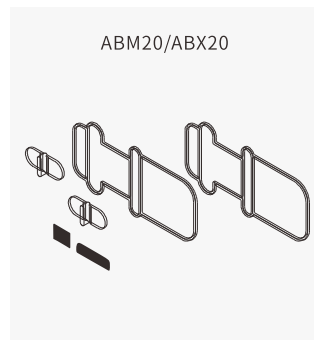
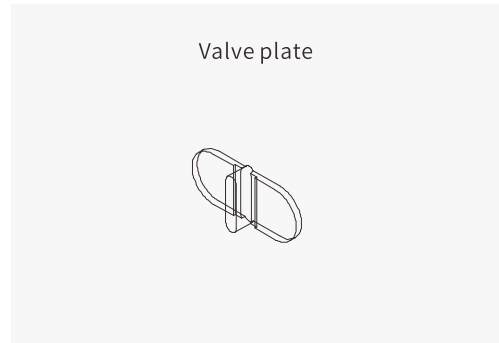
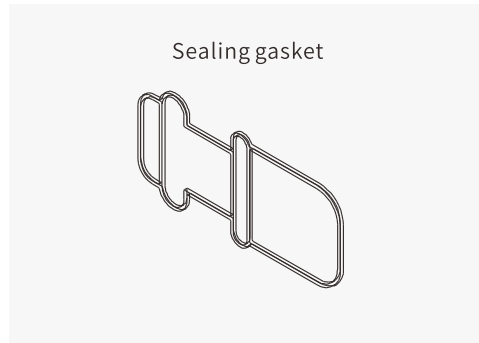
AQV

AZH

AZU

ASBP

Repair kits



Model	Specification	Sealing			Repair kits code	Applicable vacuum pump
		Nil	F	E		
ABM	10	●	○	○	PK	ABM5, 10; ABX5, 10
	20	●	○	○		ABM20, ABX20
	30	●	○	○		ABM30, ABX30

Example: ABM20-F-PK

◇ Note: "●"- standard, in stock. "○"-selective, no stock.