

ACV Series

Basic Vacuum Pump



Features

- ◇ Compact structure and easy to install, optional pressure switch.
- ◇ Nozzle and body are made of metal, ensuring long lifetime.
- ◇ Standard item is equipped with silencer to minimize noise.
- Easy to install and maintain with connection thread.

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

ACV 05 H K

① ② ③ ④

① Series	② Nozzle diameter	③ Performance specification	④ Pressure switch
ACV	05 - $\phi 0.5\text{mm}$ 10 - $\phi 1.0\text{mm}$ 15 - $\phi 1.5\text{mm}$ 20 - $\phi 2.0\text{mm}$ 25 - $\phi 2.5\text{mm}$ 30 - $\phi 3.0\text{mm}$	H - High vacuum level type (-87kPa) L - Large vacuum flow type (-57kPa)	Nil - Without pressure switch K - With adjustable pressure switch C - With unadjustable pressure switch

Selection

Model	H			L		
	Without pressure switch	K	C	Without pressure switch	K	C
ACV05	●	●	○	●	●	○
ACV10	●	●	○	●	●	○
ACV15	●	●	○	●	●	○
ACV20	●	●	○	●	●	○
ACV25	●	○	○	○	○	○
ACV30	●	○	○	○	○	○

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

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Technical parameters

Model	Nozzle diameter (mm)	Air supply pressure (bar)	Max. vacuum level (-kPa)	Max. Vacuum flow (NL/min)	Air consumption (NL/min)	Noise level dB(A)	Weight(g)			Recommended hose dia.(mm)	
							Without switch	K	C	Air supply(P)	Vacuum(V)
ACV05H	0.5	5.0	87	7	13	68	80	120	95	8	8
ACV10H	1.0	5.0	90	27	44	68	80	120	95	8	8
ACV15H	1.5	5.0	90	63	100	72	140	190	165	8	8
ACV20H	2.0	5.0	90	110	180	72	350	460	435	8	10
ACV25H	2.5	5.0	90	160	265	75	730	700	675	10	12
ACV30H	3.0	5.0	90	225	385	75	870	846	821	10	12
ACV05L	0.5	5.0	57	10	13	68	75	115	90	8	8
ACV10L	1.0	5.0	57	36	44	68	75	115	90	8	8
ACV15L	1.5	5.0	57	95	100	72	135	180	155	8	8
ACV20L	2.0	5.0	57	170	180	72	330	440	415	8	10
ACV25L	2.5	5.0	57	250	265	75	710	680	655	10	12
ACV30L	3.0	5.0	57	350	385	75	840	816	781	10	12

◇Note: Pressure range1-6bar, standard pressure 5bar. Fluid and ambient temperature 0-60°C.

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

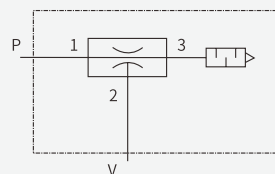
ASBP

Pressure switch specification

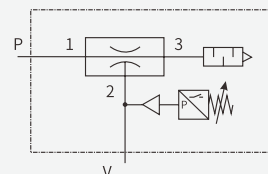
Model	ACV-K (Adjustable pressure switch)	ACV-C (Unadjustable pressure switch)
Fluid	Air	Air
Set pressure range (-kPa)	20~53	50
Ambient temperature	0~60°C (Non-freezing)	0~60°C (Non-freezing)
Operating accuracy (-kPa)	±5.3	±5
Hysteresis (-kPa)	4.0~13.3	-
Operating voltage (V)	DC24V below	DC24V below
Load current (A)	0.2	0.2
Effective length of lead wire (m)	0.7	0.7

Symbol

ACV (Standard)



ACV-K (With pressure switch)



ACV Series

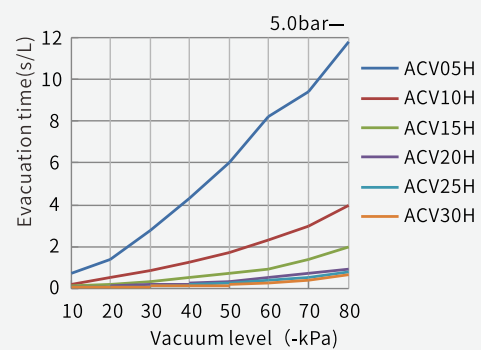
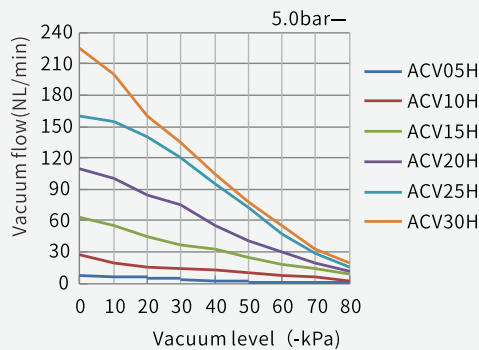
Basic Vacuum Pump

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	Max. vacuum level (-kPa)
ACV05H	5.0	13	7	5.5	4.2	3	1.5	0.8	0.5	0.2	0.05	87
ACV10H		44	27	19	16	14.5	13	10.5	8	6.5	2.5	90
ACV15H		100	63	55	44	37	32.5	25	18	14	9	90
ACV20H		180	110	100	85	75	55	40.5	30	20	12	90
ACV25H		265	160	155	140	120	95	72	47	28	15	90
ACV30H		385	225	200	160	135	105	78	55	33	19	90

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)
ACV05H	5.0	13	0.68	1.38	2.77	4.32	6.02	8.25	9.44	11.82	87
ACV10H		44	0.20	0.49	0.82	1.25	1.74	2.32	2.95	4.00	90
ACV15H		100	0.08	0.19	0.32	0.48	0.69	0.92	1.38	1.95	90
ACV20H		180	0.04	0.10	0.17	0.23	0.34	0.49	0.71	0.92	90
ACV25H		265	0.03	0.07	0.11	0.17	0.24	0.35	0.49	0.75	90
ACV30H		385	0.03	0.06	0.09	0.14	0.20	0.27	0.41	0.63	90



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

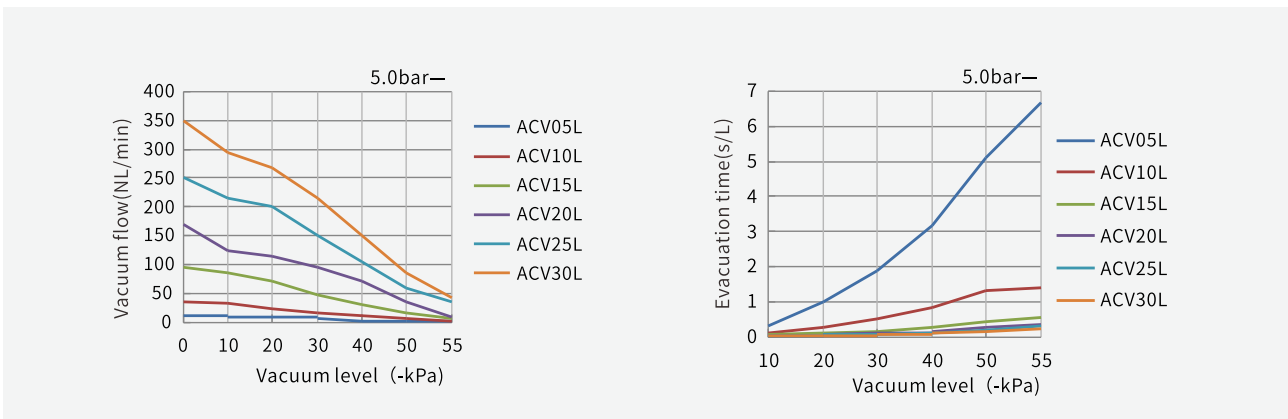
Model	Air supply pressure (bar)	Air consumption (NL/min)	0	10	20	30	40	50	55	Max. vacuum level (-kPa)
ACV05L	5.0	13	10	9	8	6.5	2.5	1.8	0.7	57
ACV10L		44	36	31.5	23.5	16.5	10	6.5	2.5	
ACV15L		100	95	85	70	47.5	30.5	15.5	5.5	
ACV20L		180	170	125	115	95	70	35.5	7.5	
ACV25L		265	250	215	200	150	105	60	36	
ACV30L		385	350	295	267	215	150	85	41	

ACV Series

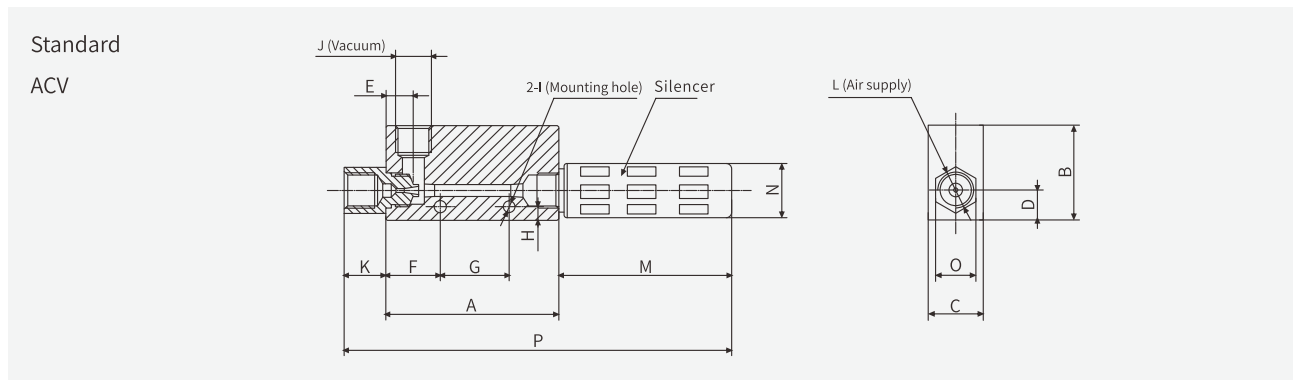
Basic Vacuum Pump

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

Model	Air supply pressure (bar)	Air consumption (NL/min)	10	20	30	40	50	55	Max. vacuum level (-kPa)
ACV05L	5.0	13	0.31	0.98	1.89	3.17	5.12	6.7	57
ACV10L		44	0.12	0.28	0.51	0.83	1.32	1.4	
ACV15L		100	0.45	0.10	0.15	0.26	0.42	0.56	
ACV20L		180	0.03	0.06	0.11	0.14	0.25	0.34	
ACV25L		265	0.02	0.05	0.08	0.12	0.18	0.3	
ACV30L		385	0.02	0.04	0.06	0.09	0.13	0.22	



Dimension (mm)



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
ACV05	45	33	16	10	8	14	20	4.5	2-φ4.5	Rp1/8	10	Rp1/8	30	φ15	14	85
ACV10	45	33	16	10	8	14	20	4.5	2-φ4.5	Rp1/8	10	Rp1/8	30	φ15	14	85
ACV15	63	35	20	11	10	20	25	5	2-φ4.5	Rp1/4	15	Rp1/4	51	φ19	17	129
ACV20	85	40	30	15	13	28	32	7	2-φ6	Rp3/8	20	Rp1/4	56	φ28	24	161
ACV20K	85	50	30	15	13	28	32	7	2-φ6	Rp3/8	20	Rp1/4	56	φ28	24	161
ACV25	100	60	40	20	16	20	50	5.5	2-φ6	Rc1/2	17	Rc3/8	119	φ40	27	236
ACV30	118	60	40	20	20	33	50	5.5	2-φ6	Rc3/4	20	Rc1/2	119	φ40	30	257

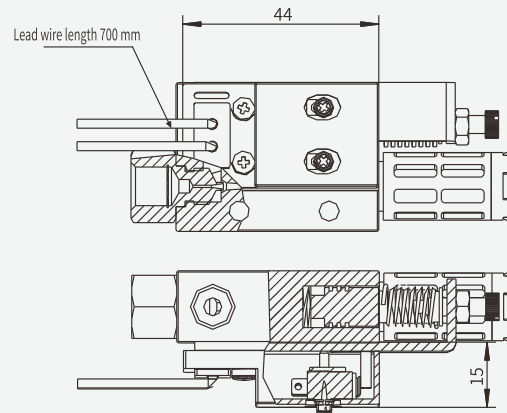
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Dimensions (mm)

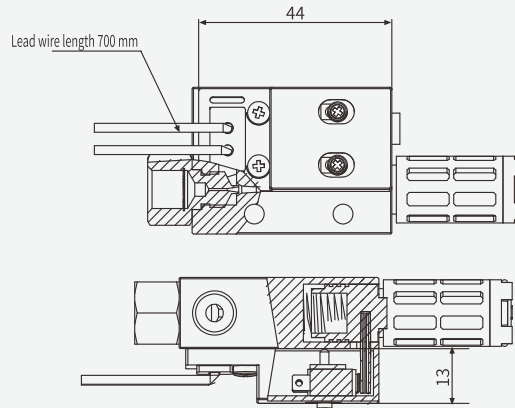
With adjustable pressure switch

ACV-K



With unadjustable pressure switch

ACV-C



Repair kits

Model of silencer	Connection thread	Color	Applicable vacuum pump
ZSB-F-G1M	G1/8 Male thread		ACV05H,10H
ZSB-X-G1M	G1/8 Male thread		ACV05L, 10L
ZSB-F-G2M	G1/4 Male thread		ACV15H
ZSB-X-G2M	G1/4 Male thread		ACV15L
ZSB-F-G4M	G1/2 Male thread		ACV20H
ZSB-X-G4M	G1/2 Male thread		ACV20L
ZSA-G6M	G3/4 Male thread		ACV25H /L,30H / L

◇Note:The above silencers are standard .