Products Special for Lithium Battery Industry

Vacuum Solutions Supplier

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AIRBEST

Make Smart Go Together

Products Special for Lithium Battery Industry

Products overview

Vacuum Generators

01 **AZK Series** RoHS

Integrated Vacuum Generator

◇ Max.vacuum level: -91kPa

◇ Max.vacuum flow: 68NL/min

ELECTRONICS PACKAGING PLASTIC

08 **AZX Series**

Large flow Integrated Vacuum Generator

◇ Max.vacuum level: -85kPa

◇ Max.vacuum flow: 220NL/min

ELECTRONICS PACKAGING PLASTIC

13 **ABM/ABX Series**

Mini Vacuum Generator

◇ Max.vacuum level: -92kPa

◇ Max.vacuum flow: 220NL/min

METAL SHEET PACKAGING PLASTIC

19 **ABM/ABX Series**

Mini Combined Type Vacuum Generator

◇ Max.vacuum level: -92kPa

◇ Max.vacuum flow: 32NL/min

METAL SHEET PACKAGING PLASTIC

24 **AMC Series** RoHS

Multistage Vacuum Generator

◇ Max.vacuum level: -95kPa

◇ Max.vacuum flow: 1,650NL/min

METAL SHEET PACKAGING WOOD COMPOSITE MATERIAL

30 **AM/AL/AH Series** RoHS

Multistage Vacuum Generator

◇ Max.vacuum level: -100.8kPa

◇ Max.vacuum flow: 1,230NL/min

METAL SHEET PACKAGING WOOD COMPOSITE MATERIAL

40 **AMD Series**

Large Flow Vacuum Generator

◇ Max.vacuum level: -95kPa

◇ Max.vacuum flow: 1,410NL/min

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44 **AZR Series** RoHS

Mini Vacuum Generator With Fast Blow-off

◇ Max.vacuum level: -88kPa

◇ Max.vacuum flow: 12.5NL/min

ELECTRONICS PLASTIC

49 **ABT Series**

Mini Vacuum Generator

◇ Max.vacuum level: -92kPa

◇ Max.vacuum flow: 46NL/min

UNIVERSAL

52 **ABP Series**

Vacuum Generator with Fast Blow-off

◇ Max.vacuum level: -81kPa

◇ Max.vacuum flow: 38NL/min

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Products Special for Lithium Battery Industry

Products overview

Vacuum Generators

Products Special for Lithium Battery Industry

Products overview

Vacuum Cups

Products Special for Lithium Battery Industry

Products overview

Vacuum Grippers

ELECTRONICS PACKAGING

Mounting Parts

RoHS

ELECTRONICS

RoHS

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RoHS

ELECTRONICS

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Products Special for Lithium Battery Industry

Products overview

Vacuum Accessories

AZK Series

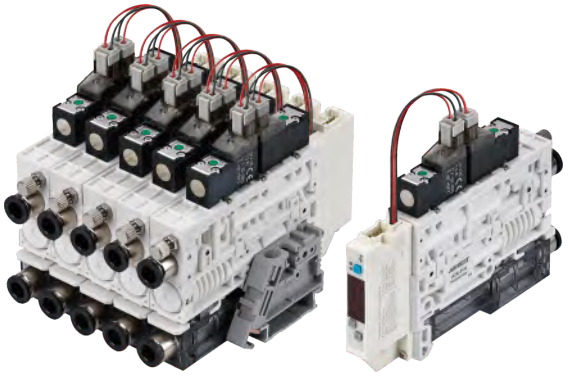
Integrated Vacuum Generator

ELECTRONICS PACKAGING PLASTIC

RoHS

Features

◇ Energy-efficient nozzle design
◇ With energy-saving control device
◇ With normally open vacuum supply valve
◇ Small size and light weight. The volume is 85cm³
◇ Transparent filter housing
◇ Single body with L bracket, DIN guide rail installation for integrated body, centralized air supply

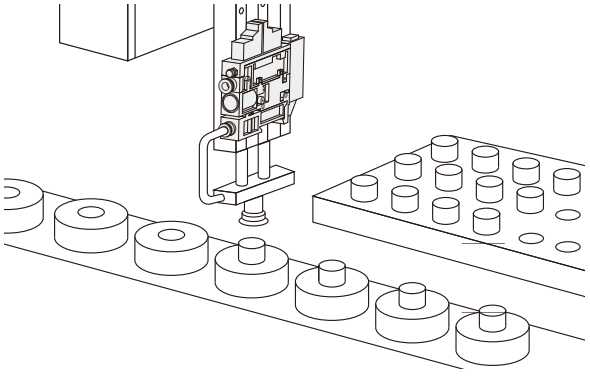


Advantages

◇ Vacuum flow increased by 50% and air consumption decreased by 30%
◇ Air consumption reduced by 90%(compared with non-energy saving type)
◇ Power outage or power off does not affect vacuum producing and prevent the workpiece from falling
◇ The device is compact and can be installed directly in the handling system
◇ The cleanliness is visible and easy to replace
◇ Simple installation, can be installed directly on the distribution box

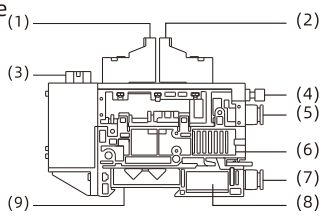
Applications

◇ Integrated vacuum generator for handling airtight and slightly porous workpieces
◇ 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



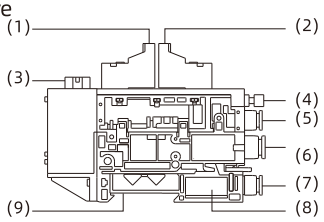
Structure - With vacuum source type (Vacuum generator type)

◇ (1) Vacuum supply valve
◇ (2) Vacuum release valve
◇ (3) Vacuum pressure switch
◇ (4) Vacuum release adjusting valve
◇ (5) Air supply port
◇ (6) Silencer
◇ (7) Vacuum port
◇ (8) Vacuum filter
◇ (9) DIN guide rail installation



Structure - Without vacuum source type (Vacuum pump type)

◇ (1) Vacuum supply valve
◇ (2) Vacuum release valve
◇ (3) Vacuum pressure switch
◇ (4) Vacuum release adjusting valve
◇ (5) Air supply port
◇ (6) Vacuum pump connector
◇ (7) Vacuum port
◇ (8) Vacuum filter
◇ (9) DIN guide rail installation



AZK Series

Integrated Vacuum Generator

How to order

AZK - S × 8 - NO - N - D
① ② ③ ④ ⑤ ⑥

① Series	② Specification	③ Stack	④ Control valve specification
AZK	S - Low vacuum level type	Nil - Single body	Nil - Supply valve NC + release valve NC
	X - High vacuum level type	2	NO - Supply valve NO + release valve NC
	P - Low air supply pressure and high vacuum level type	3	(lead wire length 300mm, power supply DC24V)
		....	
	L - Large flow type	8	
	B - Vacuum pump type		

⑤ Vacuum switch	⑥ Bracket
Nil - Without vacuum switch	Nil - Single air supply, without bracket
N - NPN, without energy saving function	F - Single air supply, with bracket(single body)
P - PNP, without energy saving function	D - Single air supply, guide rail installation(integrated)
NE - NPN, with energy saving function	DP - Centralized air supply, guide rail installation(integrated)
PE - PNP, with energy saving function	

◇ Note: 1. Only NE/PE are with check valve for energy saving, others are without check valve
2. Energy saving function is not optional for L-large flow type and B-Vacuum pump type
3. Centralized air supply is not optional for B-Vacuum pump type

Technical parameters

Model	Air supply pressure range bar	Rated air supply pressure bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Max. break flow rate NL/min	Air consumption NL/min	Noise level dB(A)	Weight g		Recommended hose dia.(mm)		
								Without pressure switch	With pressure switch	Air supply port P	Vacuum pump connector	Vacuum port V
AZK-S	3.0~6.0	6.0	74	44	60	26	64~68	88.5	102.5	ϕ6	-	ϕ6
AZK-X	3.0~6.0	5.0	91	41	54	29	64~68	88.5	102.5	ϕ6	-	ϕ6
AZK-P	3.0~6.0	3.7	88	40	46	32	64~68	88.5	102.5	ϕ6	-	ϕ6
AZK-L	3.0~6.0	5.0	90	68	48	85	74~80	102	114	ϕ6	-	ϕ8
AZK-B	3.0~6.0	-	-	35	-	-	-	101.5	113.5	ϕ4	ϕ6	ϕ6

◇ Note: 35NL/min is the max. allowed passing flow of AZK-B, AZK-L external silencer

AZK Series

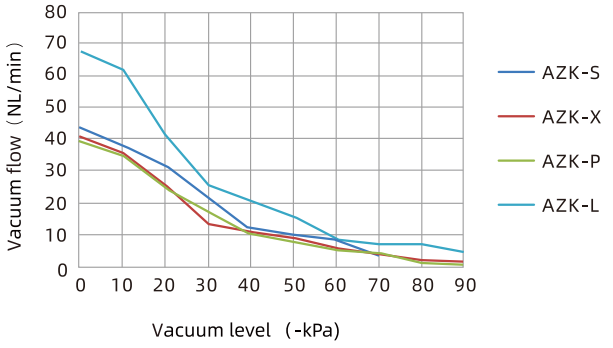
Integrated Vacuum Generator

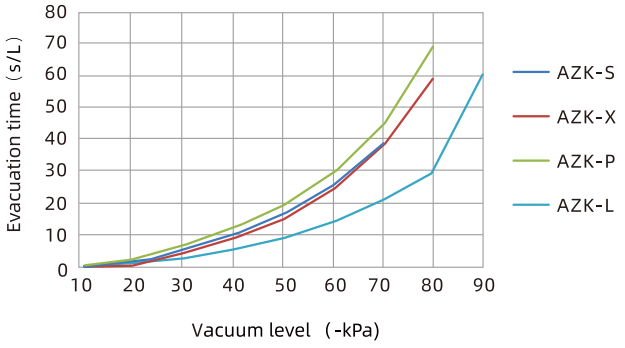
Vacuum flow(NL/min) at different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	90	Max. vacuum level -kPa
AZK-S	6.0	26	44.0	38.0	32.0	22.0	12.0	10.0	8.5	4.0	-	-	74
AZK-X	5.0	29	41.0	36.0	26.0	13.7	11.0	9.3	6.6	4.6	2.7	2.0	91
AZK-P	3.7	32	40.0	35.0	25.2	17.7	10.9	8.0	5.6	4.2	1.5	1.0	88
AZK-L	5.0	85	68.0	62.0	42.0	26.0	20.6	16.2	9.0	7.2	7.2	5.0	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	90	Max. vacuum level -kPa
AZK-S	6.0	26	0.01	0.19	0.50	1.02	1.72	2.60	3.88	-	-	74
AZK-X	5.0	29	0.02	0.14	0.47	0.96	1.56	2.50	3.87	6.00	-	91
AZK-P	3.7	32	0.05	0.30	0.71	1.26	1.95	2.97	4.49	6.95	-	88
AZK-L	5.0	85	0.06	0.16	0.33	0.60	0.95	1.43	2.14	3.03	6.16	90





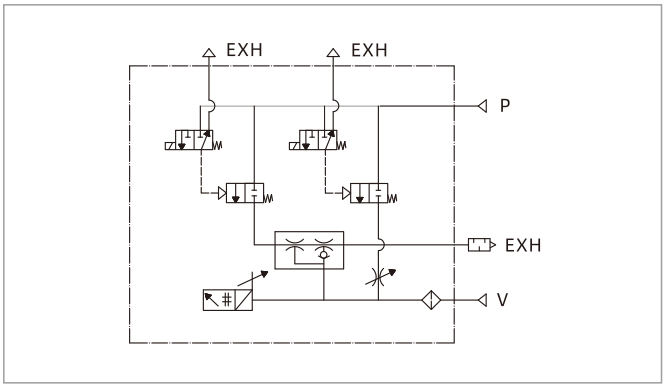
AZK Series

Integrated Vacuum Generator

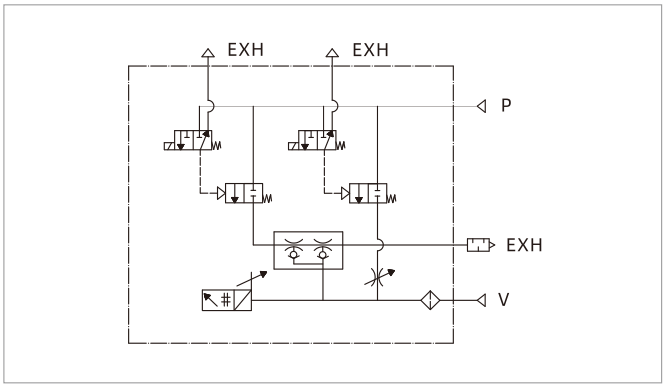
Technical parameters - Pressure switch

Model		ZPDC-□	ZPDC-□-E
Pressure range		-100~100kPa	-100~100kPa
Setting pressure range		-105~105kPa	-105~105kPa
Proof pressure		500kPa	500kPa
General gas		Air,Non-corrosive, non flammable gas	Air, Non-corrosive,non flammable gas
Power supply voltage		24V DC±10%, RIPPLE（P-P）10% or less	24V Dc±10%, RIPPLE(P-P)10%or less
Current consumption		≤40mA(Without load)	≤40mA (Without load)
Switch output	Output mode	2NPN or 2PNP open collector output+1~5V linear analog output	1NPN or 1PNP open collector output
	Max. load current	125mA	125mA
	Max. supply voltage	30V DC (NPN) 24V DC (PNP)	24V DC
	Residual voltage	≤1.5V	≤1.5V
	Response time	≤2.5ms (chattering-proof function: 25ms, 100ms,	≤2.5ms (chattering-proof function: 2.5ms, 20ms,
		250ms, 500ms, 1000ms, 1500ms selectable)	100ms, 500ms, 1000ms, 1999ms selectable)
	Output short circuit protection	Yes	OUT switch:Yes;V-Sol/D-Sol:No
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	
Switch ON indicator		OUT1:Green/OUT2:Red	
Environmental resistance	IP Grade	IP40	
	Ambient temp.range	Operation：0~50℃	
	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℃)	
Lead wire		Oil proof PVC cable（0.15mm²）	

Air circuit schematic diagram



AZK-□-N AZK-□-P

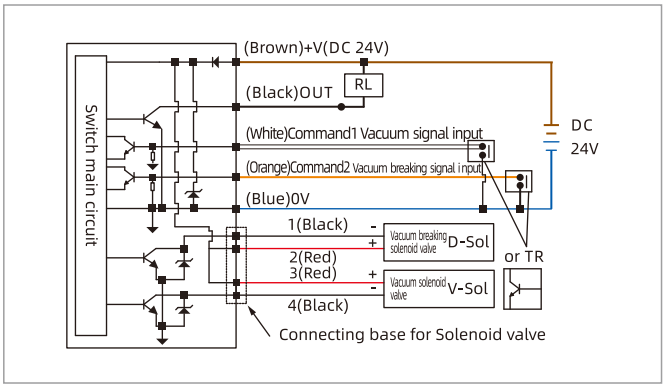


AZK-□-NE AZK-□-PE

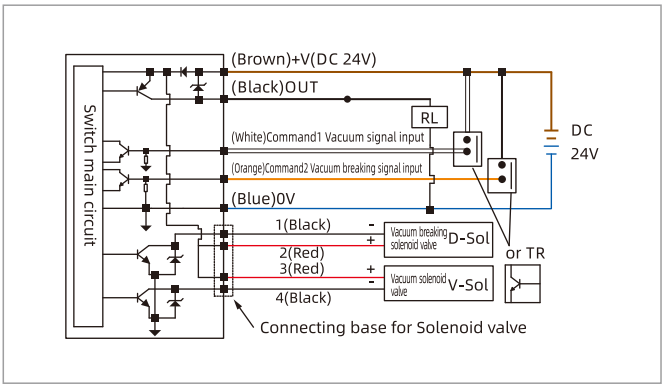
AZK Series

Integrated Vacuum Generator

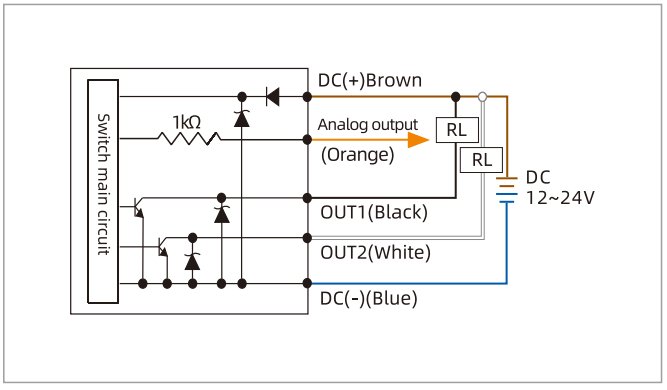
Output circuit wiring diagrams



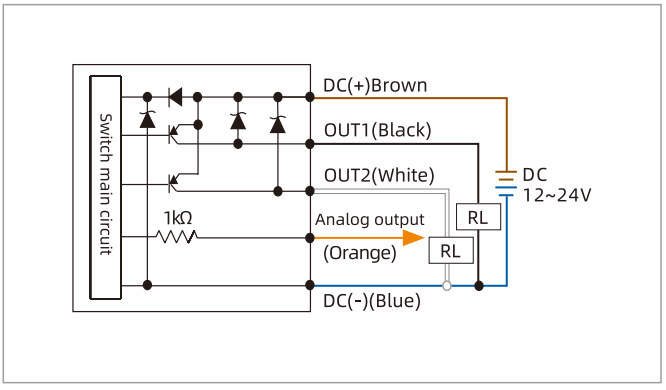
ZPDC-N-E NPN output



ZPDC-P-E PNP output

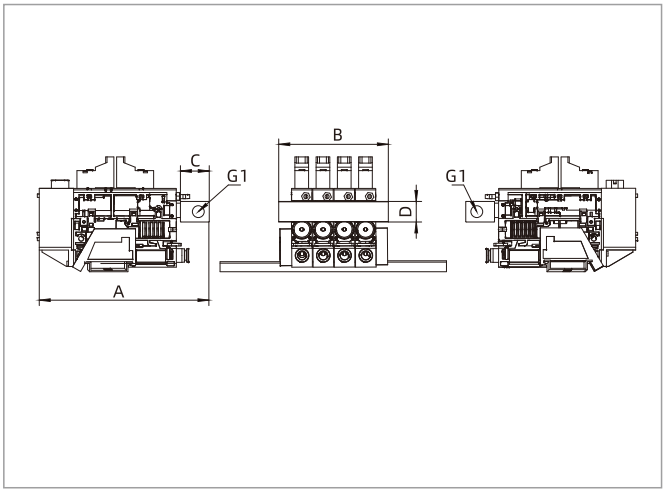


ZPDC-N 2NPN+1Analog voltage output(1~5V)



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

Centralized air supply dimensions(mm)



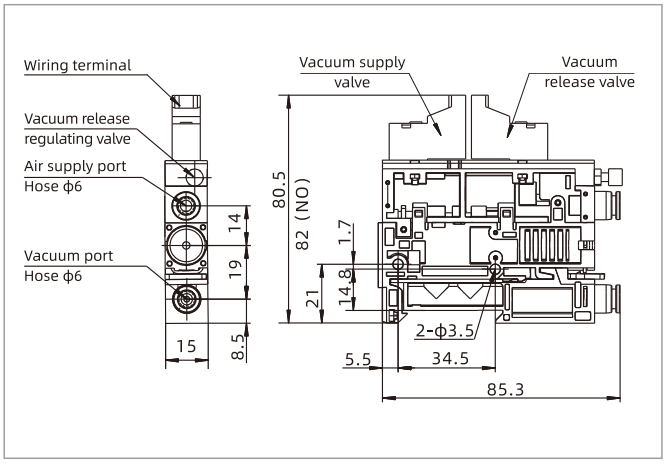
Stack	A	B	C	D	G1
2	124	49	21	15	G1/8
3	124	64.5	21	15	G1/8
4	124	80	21	15	G1/8
5	124	95.5	21	15	G1/8
6	124	111	21	15	G1/8
7	124	126.5	21	15	G1/8
8	124	142	21	15	G1/8

Max.number of manifold stations that can operate simultaneously	AZK-X	AZK-P	AZK-S	AZK-L
Air supply from one side	6	6	6	4
Air supply from both sides	8	8	8	8

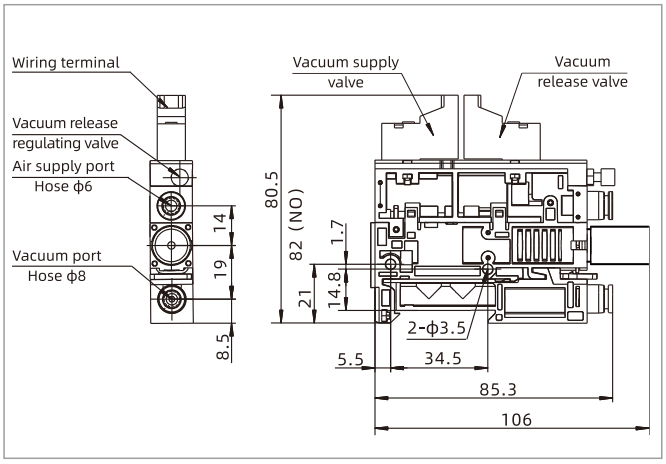
AZK Series

Integrated Vacuum Generator

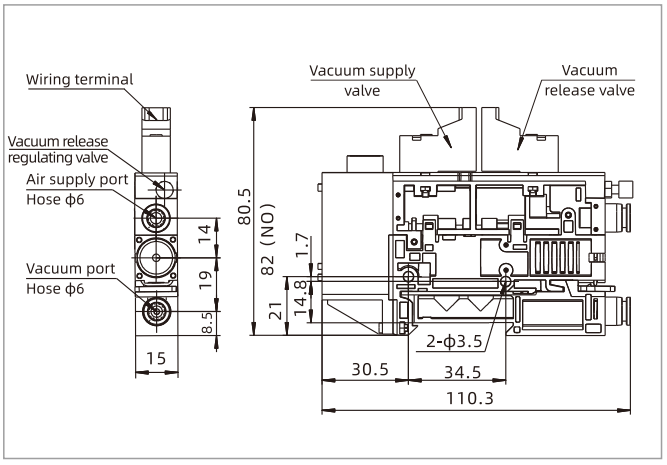
Dimensions(mm)



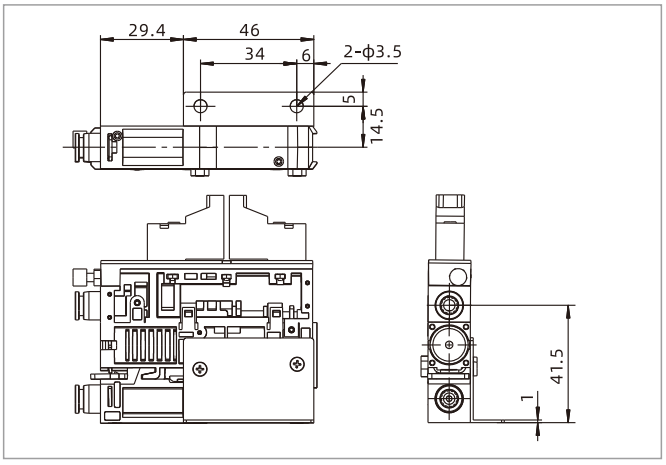
AZK-□ Single body



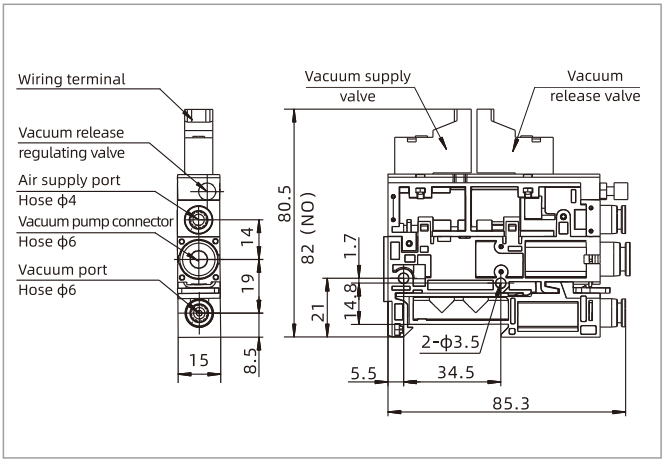
AZK-L Single body



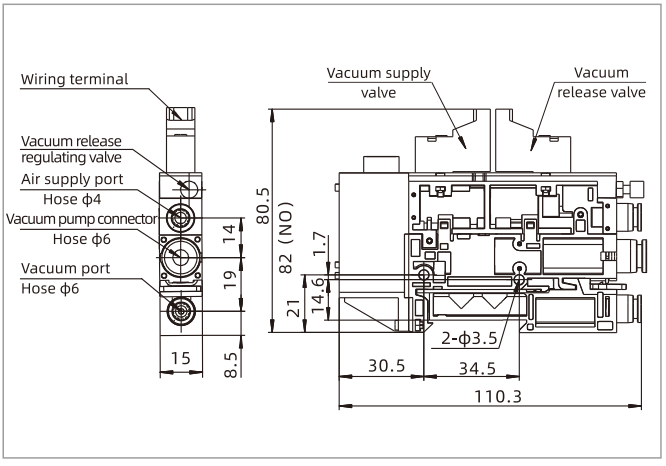
AZK-□-□ Single body with pressure switch



AZK-□-F Single body with mounting bracket



AZK-B Single body

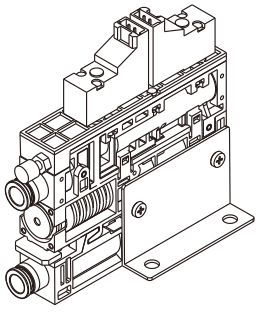


AZK-B-□ Single body with pressure switch

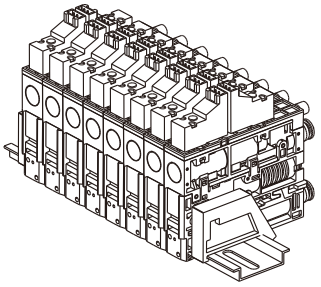
AZK Series

Integrated Vacuum Generator

Installation diagram

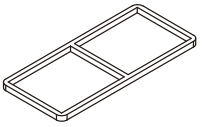


Mounting with bracket for single body

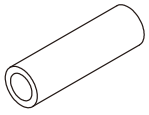


Mounting with DIN guide rail for combined type

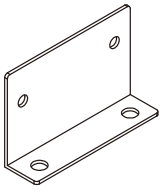
Repair kits



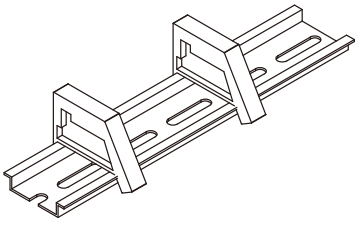
Sealing gasket



Filter element



L bracket



Guide rail

Item	Model	Remark
Filter parts	AZK-FE	Filter element + sealing gasket
Solenoid valve leadwire	AZK-N	Plug lead wire length 300mm
Energy-saving leadwire	AZK-NE	Ends lead wire
Bracket mounting parts	AZK-F	L bracket+M3.5x20screw/nut(2 pcs each)
Guide rail mounting parts(2-3 layers)	AZK-2-D	Length 130mm
Guide rail mounting parts(4-5 layers)	AZK-4-D	Length 165mm
Guide rail mounting parts(6-7 layers)	AZK-6-D	Length 200mm
Guide rail mounting parts(8 layers)	AZK-8-D	Length 235mm

AZX Series

Large Flow Integrated Vacuum Generator

ELECTRONICS PACKAGING PLASTIC

Features

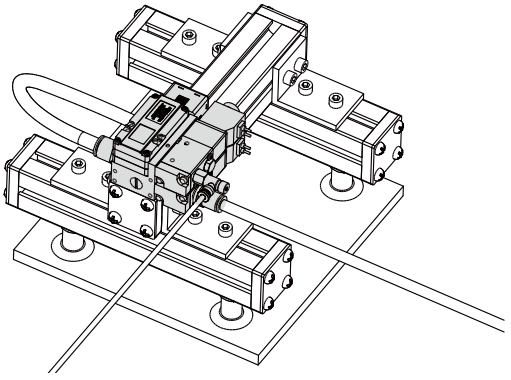
◇ Energy-efficient nozzle design
◇ Integrated with control valve, vacuum gauge and regulating valve
◇ Modular design

Advantages

◇ Large vacuum flow can be produced under the condition of low air consumption
◇ Integrated design, saving piping and wiring, controlling setting time,etc.
◇ High reliability and stability

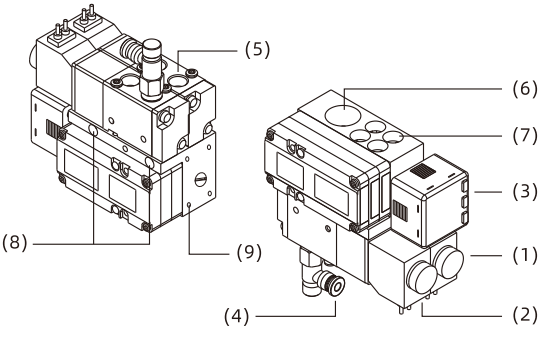
Applications

◇ Integrated vacuum generator for handling porous workpieces
◇ 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



Structure

◇ (1) Vacuum supply valve
◇ (2) Vacuum release valve
◇ (3) Vacuum pressure switch
◇ (4) Release port
◇ (5) Air supply port
◇ (6) Vacuum port
◇ (7) Exhaust port
◇ (8) Mounting hole
◇ (9) Threaded mounting hole



AZX Series

Large Flow Integrated Vacuum Generator

How to order

AZX 20 - N

① ② ③

① Series	② Specification	③ Vacuum switch
AZX	20	N - 1NPN output+1 analog voltage output (1-5V)
	30	P - 1PNP output+1 analog voltage output (1-5V)

Selection

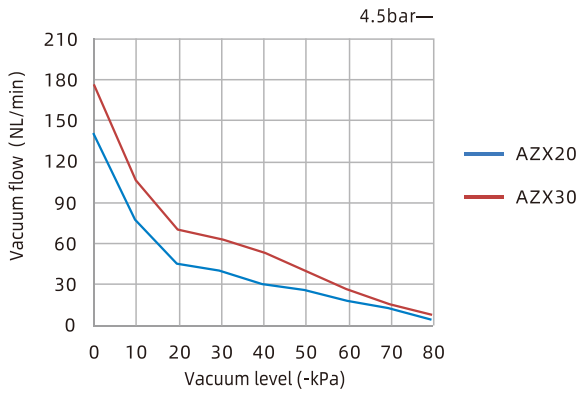
Model/ Vacuum switch N	P
AZX20-N	AZX20-P
AZX30-N	AZX30-P

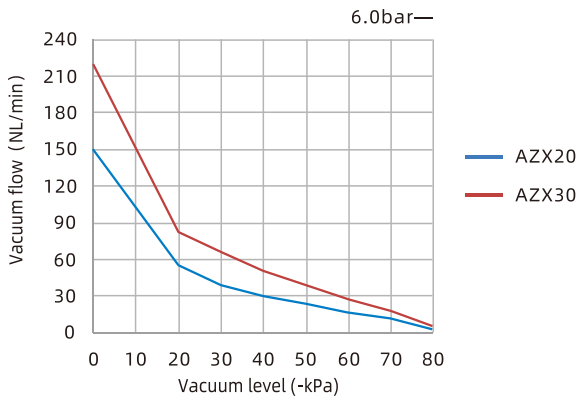
Technical parameters

Model	Air supply pressure range bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Air consumption NL/min	Noise level dB(A)	Weight g	Recommended hose dia. mm	
							Air supply port P	Vacuum port V
AZX20	4.5~6.0	85	141~150	55~85	60~70	411	ϕ8	ϕ12
AZX30	4.5~6.0	85	175~220	87~125	60~70	424	ϕ10	ϕ12

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
AZX20	4.5	55	141	77	45	39.5	29.5	25	17.5	12	3	85
AZX30	4.5	87	175	105	70	63	53	40	26	14	6.5	85
AZX20	6.0	85	150	100	55	38	30	24	16	11	3.2	85
AZX30	6.0	125	220	150	81	65	50	38	27	18	5	85



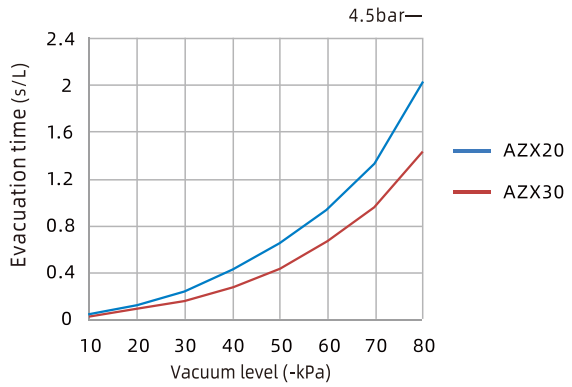


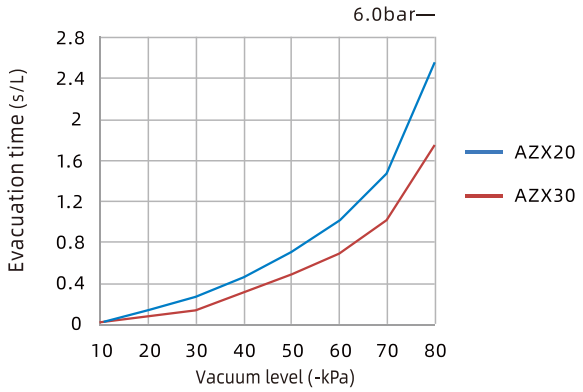
AZX Series

Large Flow Integrated Vacuum Generator

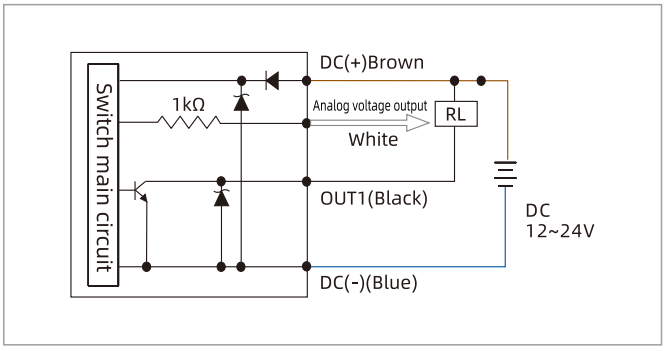
Evacuation time(s/L) to reach different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	Max. vacuum level -kPa
AZX20	4.5	55	0.04	0.12	0.23	0.41	0.65	0.93	1.33	2.03	85
AZX30	4.5	87	0.03	0.09	0.16	0.27	0.43	0.66	0.95	1.43	85
AZX20	6.0	85	0.02	0.15	0.28	0.46	0.71	1.02	1.48	2.55	85
AZX30	6.0	125	0.02	0.08	0.14	0.31	0.49	0.69	1.02	1.75	85

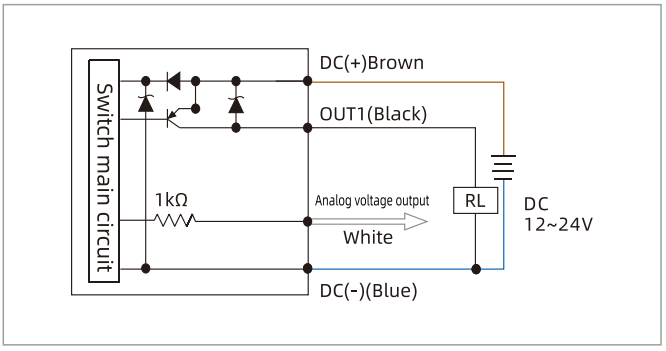




Output circuit wiring diagrams



ZPDT-CNV-R1M 1NPN+Analog voltage output(1-5V)



ZPDT-CPV-R1M 1PNP+Analog voltage output(1-5V)

AZX Series

Large Flow Integrated Vacuum Generator

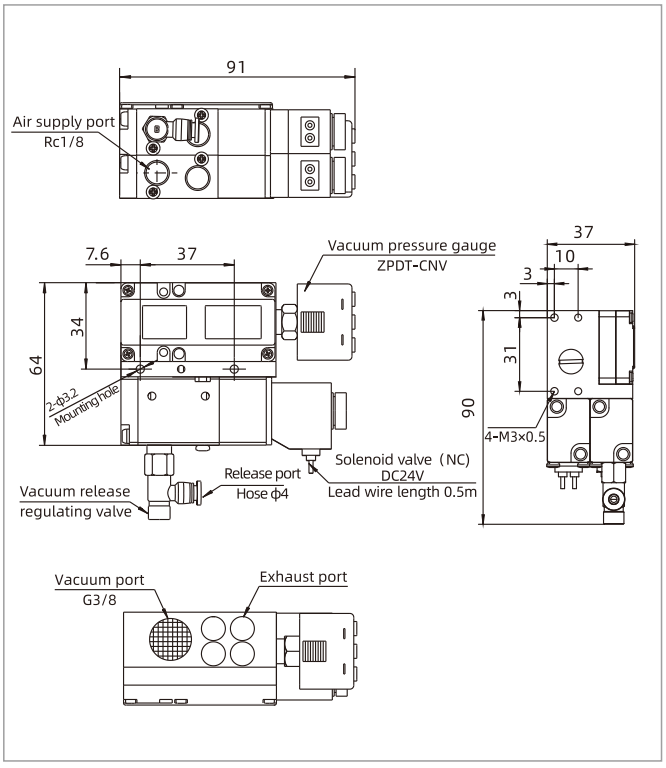
Technical parameters

Model		ZPDT-C（Compound）
Rated pressure range		-100.0~100.0kPa
Setting pressure range		-103.0~103.0kPa
Withstand pressure		500kPa
Fluid		Air, Non-corrosive gas/Non-flammable gas
Pressure unit	kPa	0.1
Set pressure resolution	MPa	-
	kgf/cm^2	0.001
	bar	0.001
	psi	0.01
	inHg	0.1
	mmHg	1
Power supply voltage		12 to 24V Dc±10%, ripple(P-P)10% or less
Current consumption		≦40mA (Without load)
Switch output	Output type	Open collector output (NPN or PNP)
	load current	Max.125mA
	Residual voltage	≦1.0V
	Response time	≦2.5ms (Chattering-proof function: 25ms,100ms,250ms, 500ms, 1000ms, 1500ms selectable)
Analog output	Output Voltage	1-5V ±2.5%F.S (within rated pressure range)
	Output impedance	1kΩ
	Linearity	±1% F.S.
Display	Display	Three colors (Red/ Green/ Orange)Sampling rate:5 times/sec,2 times/sec,1 time/sec for choice.)
	Indicator accuracy	±1%F.S.±1 digit (ambient temperature：25±3℃)
	Repeatability	±0.3%F.S.±1 digit
	Switch ON Indicator	Orange (1 indicator)OUT1
Environmental resistance	IP Grade	IP40
	Ambient temperature	0~50℃
	Temperature characteristic	±3% F.S. Comparative parameter temperature 25℃ (at temp. range of 0~50℃)
	Storage temperature	Storage：-10-60℃ (No condensation or freezing)
	Ambient temperature	Operation/ storage: 35-85%HR (No condensation)
	Withstand voltage	1000VAC1 minute (between case and lead wire)
	Insulation resistance	More than 50MΩ (500V DC) (between case and lead wire)
	Vibration resistance	Complex amplitude 1.5mm Or 10G, 10Hz~150Hz~10Hz for 1 minute, two hours each direction of X, Y and Z
	Impact resistance	$100m/s^2$ (10G) 3 times each direction of X, Y and Z
Lead wire		Oil-resistance cable ($0.15mm^2$)
Weight		67g (with 2 meters lead wire)

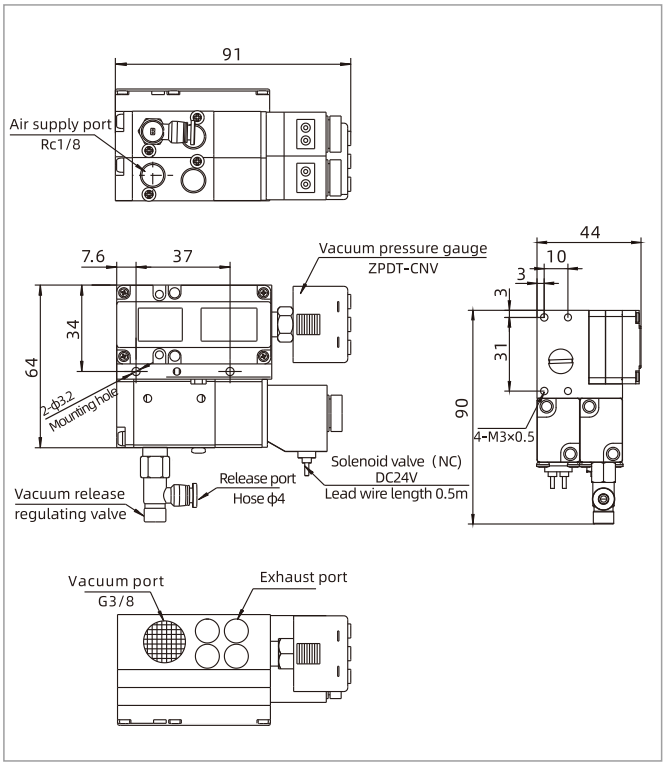
AZX Series

Large Flow Integrated Vacuum Generator

Dimensions(mm)



AZX20-N AZX20-P



AZX30-N AZX30-P

ABM/ABX Series

Mini Vacuum Generator

METAL SHEET PACKAGING PLASTIC

Features

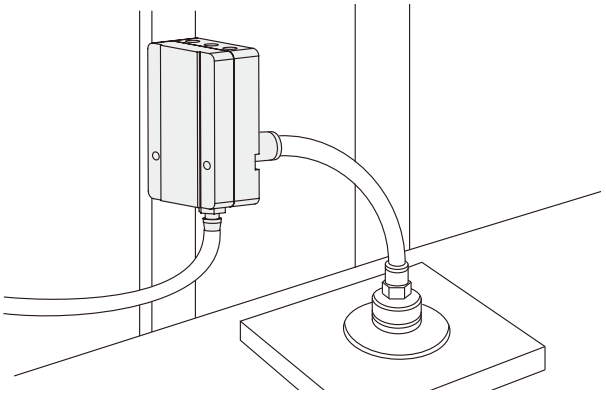
◇ Energy-efficient nozzle design
◇ Small size, light weight, can be connected with suction cup directly
◇ There are a variety of air port specifications （A,NA ,B,NB,C,NC)
◇ Built-in silencer and external silencer are optional

Advantages

◇ It can produce more vacuum flow in the condition of less air consumption
◇ For the occasions with limited installation space and weight
◇ Suitable port connection specifications can be selected according to the on-site requirements
◇ It can meet different requirements of vacuum flow in different working conditions
◇ Reduce product noise greatly

Applications

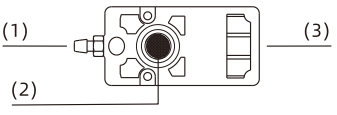
◇ Universal vacuum generator, widely used in all kinds of vacuum systems
◇ Suitable for metal plate handling, packaging machinery, injection molding and industrial robot technology field



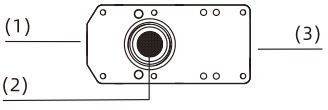
Structure

◇ (1) Air supply port
◇ (2) Vacuum port
◇ (3) Exhaust port
◇ (4) Vacuum filter
◇ (5) Silencer

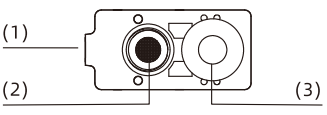
A NA type

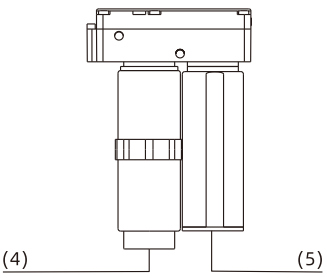


B NB type



C NC type





ABM/ABX Series

Mini Vacuum Generator

How to order

ABM 10 - B - F

① ② ③ ④

① Series	② Specification	③ Port connection	④ Sealing
ABM - Universal type (-85kPa)	5	A NA	Nil - Default,NBR
ABX - High vacuum level type (-92kPa)	10	B NB	F - Fluorine rubber
	20	C NC	E - EPDM
	30	(Refer to table1)	

Port connection table1

Port connection	Air supply port	Vacuum port	Exhaust port	Applicable vacuum generator	
A	M5-ϕ6	G1/8	Internal silencer	ABM5、10	ABX5、10
NA	M5-ϕ6	NPSF1/8	Internal silencer	ABM5、10	ABX5、10
B	G1/8	G3/8	Internal silencer	ABM5、10 、20、30	ABX5、10、20、30
NB	NPSF1/8	NPSF3/8	Internal silencer	ABM5、10 、20、30	ABX5、10、20、30
C	G1/8	G3/8	External silencer	ABM5、10 、20、30	ABX5、10、20、30
NC	NPSF1/8	NPSF3/8	External silencer	ABM5、10 、20、30	ABX5、10、20、30

Selection - ABM

Model/ Specification	A	NA	B	NB	C	NC
ABM5-□	ABM5-A	ABM5-NA	ABM5-B	ABM5-NB	ABM5-C	ABM5-NC
ABM10-□	ABM10-A	ABM10-NA	ABM10-B	ABM10-NB	ABM10-C	ABM10-NC
ABM20-□	-	-	ABM20-B	ABM20-NB	ABM20-C	ABM20-NC
ABM30-□	-	-	ABM30-B	ABM30-NB	ABM30-C	ABM30-NC

Selection - ABX

Model/ Specification	A	NA	B	NB	C	NC
ABX5-□	ABX5-A	ABX5-NA	ABX5-B	ABX5-NB	ABX5-C	ABX5-NC
ABX10-□	ABX10-A	ABX10-NA	ABX10-B	ABX10-NB	ABX10-C	ABX10-NC
ABX20-□	-	-	ABX20-B	ABX20-NB	ABX20-C	ABX20-NC
ABX30-□	-	-	ABX30-B	ABX30-NB	ABX30-C	ABX30-NC

ABM/ABX Series

Mini Vacuum Generator

Technical parameters - ABM

Model	Air supply pressure range bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Air consumption NL/min	Noise level dB(A)	Working temperature ℃	Recommended hose dia. mm	
							Air supply port P	Vacuum port V
ABM5	4.5~6.0	85	35~37	12~20	50~65	-20~80	ϕ6	ϕ8
ABM10	4.5~6.0	85	70~75	28~42	55~68	-20~80	ϕ6	ϕ10
ABM20	4.5~6.0	85	141~150	55~85	60~68	-20~80	ϕ8	ϕ12
ABM30	4.5~6.0	85	175~220	87~125	60~68	-20~80	ϕ10	ϕ12

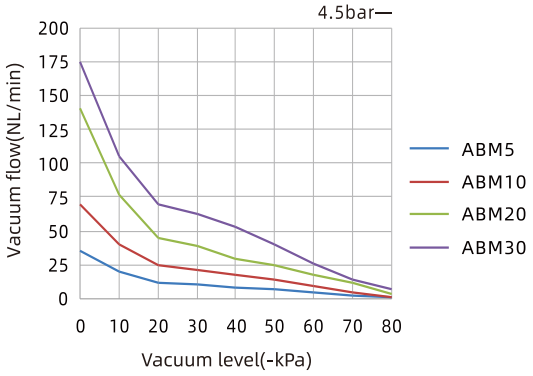
Technical parameters - ABX

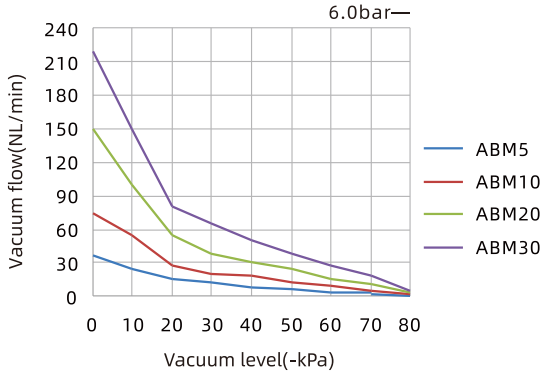
Model	Air supply pressure range bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Air consumption NL/min	Noise level dB(A)	Working temperature ℃	Recommended hose dia. mm	
							Air supply port P	Vacuum port V
ABX5	4.5~6.0	92	30~32	18~22	50~65	-20~80	ϕ6	ϕ8
ABX10	4.5~6.0	92	52~63	31~40	55~68	-20~80	ϕ6	ϕ10
ABX20	4.5~6.0	92	110~125	79~89	60~69	-20~80	ϕ8	ϕ12
ABX30	4.5~6.0	92	180~185	128~137	60~69	-20~80	ϕ10	ϕ12

◇ Note: Max. air supply pressure is 7.0 bar

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
ABM5	4.5	12	35.0	20.5	12.0	10.5	8.5	6.5	4.5	2.5	0.8	85
ABM10	4.5	28	70.0	40.5	25.0	21.0	18.0	14.0	9.5	5.0	1.3	85
ABM20	4.5	55	141.0	77.0	45.0	39.5	29.5	25.0	17.5	12.0	3.0	85
ABM30	4.5	87	175.0	105.0	70.0	63.0	53.0	40.0	26.0	14.0	6.5	85
ABM5	6.0	20	37.0	25.0	15.5	12.0	8.0	6.0	4.0	2.7	0.6	85
ABM10	6.0	42	75.0	55.0	27.0	20.0	18.0	12.0	9.0	5.0	2.0	85
ABM20	6.0	85	150.0	100.0	55.0	38.0	30.0	24.0	16.0	11.0	3.2	85
ABM30	6.0	125	220.0	150.0	81.0	65.0	50.0	38.0	27.0	18.0	5.0	85



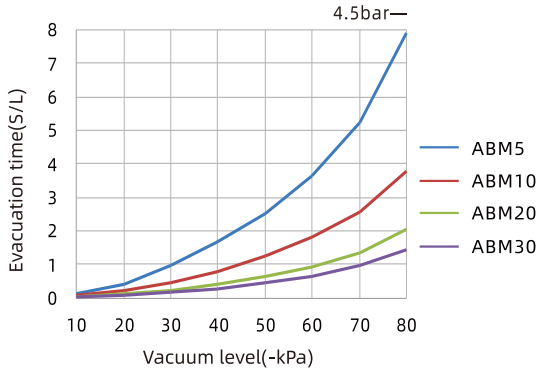


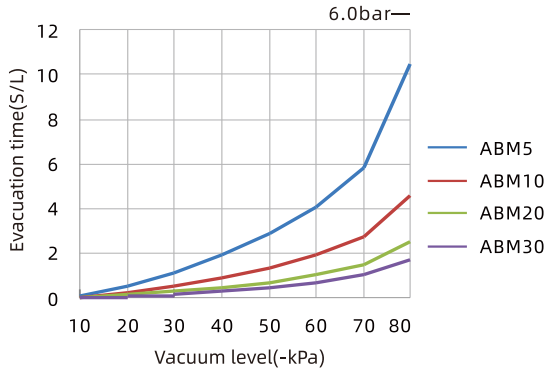
ABM/ABX Series

Mini Vacuum Generator

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

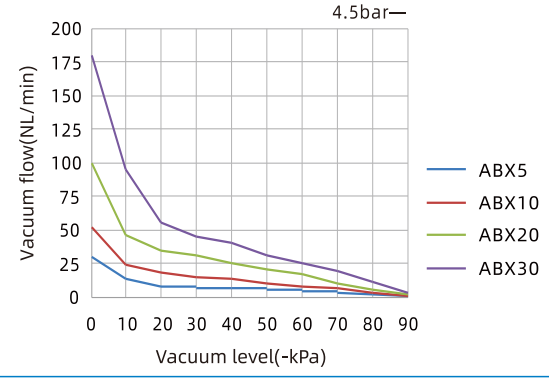
Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	Max. vacuum level -kPa
ABM5	4.5	12	0.11	0.42	0.95	1.66	2.50	3.65	5.25	7.89	85
ABM10	4.5	28	0.08	0.20	0.44	0.80	1.24	1.80	2.55	3.80	85
ABM20	4.5	55	0.04	0.12	0.23	0.41	0.65	0.93	1.33	2.03	85
ABM30	4.5	87	0.03	0.09	0.16	0.27	0.43	0.66	0.95	1.43	85
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	85
ABM20	6.0	85	0.02	0.15	0.28	0.46	0.71	1.02	1.48	2.55	85
ABM30	6.0	125	0.02	0.08	0.14	0.31	0.49	0.69	1.02	1.75	85

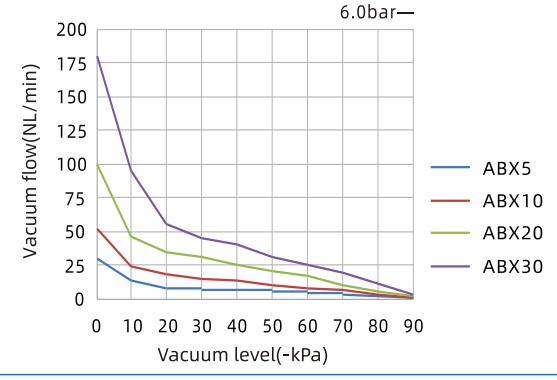




Vacuum flow(NL/min) at different vacuum levels(-kPa)

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	30.0	13.0	7.5	7.0	6.0	5.0	4.0	3.2	1.8	0.4	92
ABX10	4.5	31	52.0	24.0	18.0	15.0	13.0	10.5	8.0	6.0	2.5	0.8	92
ABX20	4.5	79	100.0	46.0	34.0	30.5	25.0	21.0	17.0	10.5	5.0	1.6	92
ABX30	5.0	128	180.0	95.0	55.0	45.5	40.5	30.5	25.0	19.0	11.5	3.0	92
ABX5	6.0	22	32.0	20.0	8.5	7.5	6.0	5.0	4.0	3.0	1.5	0.15	92
ABX10	6.0	40	63.0	36.0	18.0	16.0	12.5	10.5	8.5	6.0	3.5	0.5	92
ABX20	6.0	89	125.0	73.0	35.0	30.0	25.0	22.0	18.0	12.0	7.0	0.9	92
ABX30	6.0	137	185.0	103.0	51.0	46.0	38.0	31.0	25.0	19.0	12.0	1.8	92



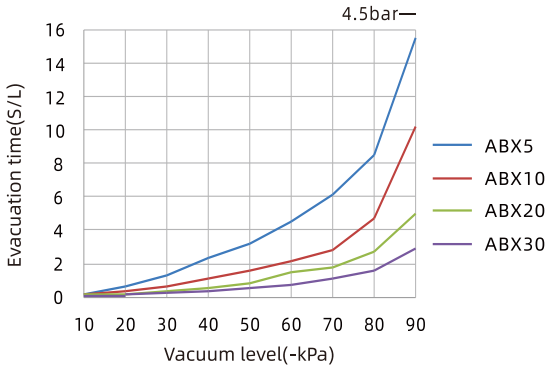


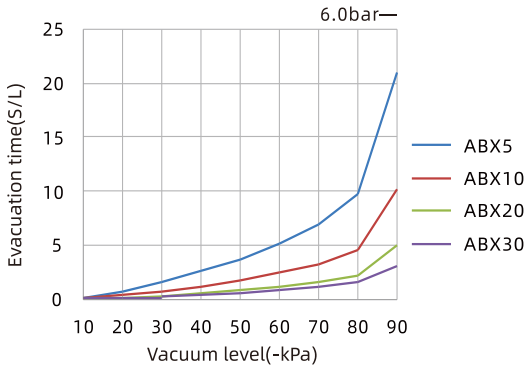
ABM/ABX Series

Mini Vacuum Generator

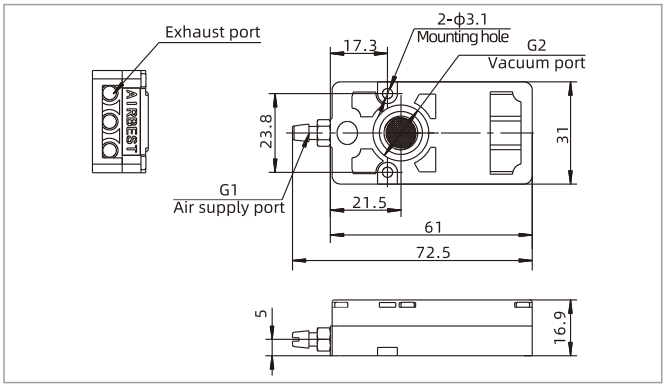
Evacuation time(s/L) to reach different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	90	Max. vacuum level -kPa
ABX5	4.5	18	0.13	0.60	1.26	2.30	3.20	4.50	6.15	8.50	15.50	92
ABX10	4.5	31	0.11	0.30	0.65	1.10	1.55	2.15	2.85	4.70	10.20	92
ABX20	4.5	79	0.09	0.16	0.32	0.55	0.80	1.50	1.80	2.70	5.00	92
ABX30	5.0	128	0.06	0.12	0.23	0.36	0.53	0.76	1.10	1.60	2.90	92
ABX5	6.0	22	0.15	0.71	1.52	2.54	3.72	5.12	6.95	9.70	21.00	92
ABX10	6.0	40	0.09	0.32	0.71	1.18	1.74	2.40	3.26	4.55	10.20	92
ABX20	6.0	89	0.05	0.15	0.31	0.52	0.77	1.08	1.54	2.15	4.92	92
ABX30	6.0	137	0.03	0.13	0.23	0.38	0.58	0.82	1.11	1.54	3.00	92





Dimensions(mm)



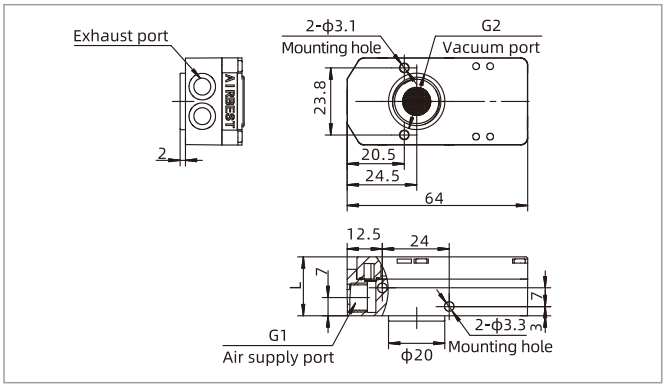
ABM5-A/NA ABM10-A/NA
ABX5-A/NA ABX10-A/NA

Model/size	G1	G2	Weight g
ABM/ABX5-A	ϕ6	G1/8	58
ABM/ABX5-NA	ϕ6	NPSF1/8	58
ABM/ABX10-A	ϕ6	G1/8	59
ABM/ABX10-NA	ϕ6	NPSF1/8	59

ABM/ABX Series

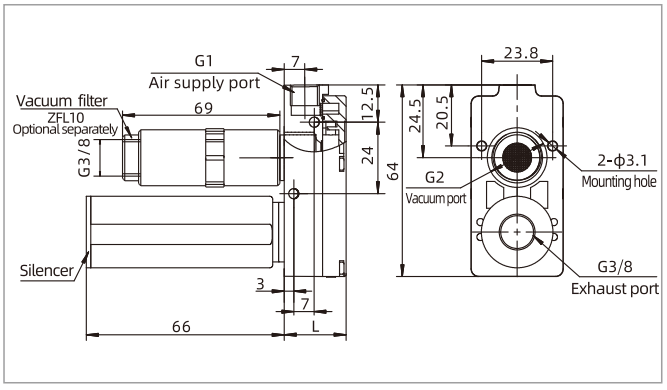
Mini Vacuum Generator

Dimensions(mm)



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

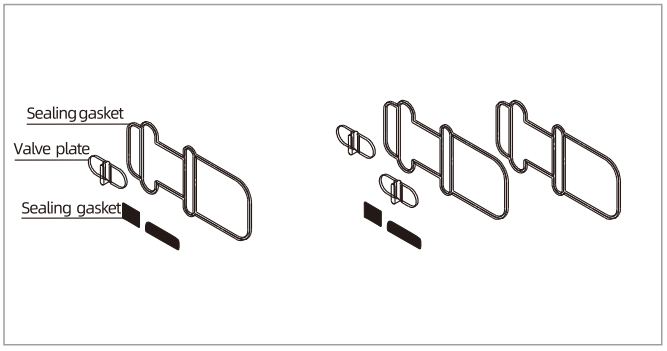
Model/size	G1	G2	L	Weight g
ABM/ABX5-B	G1/8	G3/8	20.7	64
ABM/ABX5-NB	NPSF1/8	NPSF3/8	20.7	64
ABM/ABX10-B	G1/8	G3/8	20.7	64
ABM/ABX10-NB	NPSF1/8	NPSF3/8	20.7	64
ABM/ABX20-B	G1/8	G3/8	28	77
ABM/ABX20-NB	NPSF1/8	NPSF3/8	28	77
ABM/ABX30-B	G1/8	G3/8	35	89
ABM/ABX30-NB	NPSF1/8	NPSF3/8	35	89



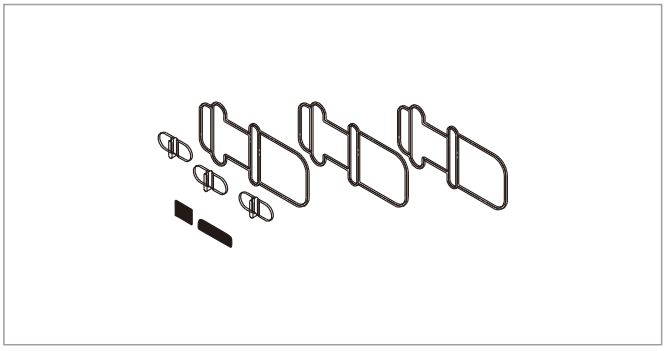
ABM(5-30)-C/NC ABX(5-30)-C/NC

Model/size	G1	G2	L	Weight g
ABM/ABX5-C	G1/8	G3/8	20.7	84
ABM/ABX5-NC	NPSF1/8	NPSF3/8	20.7	84
ABM/ABX10-C	G1/8	G3/8	20.7	87
ABM/ABX10-NC	NPSF1/8	NPSF3/8	20.7	87
ABM/ABX20-C	G1/8	G3/8	28	100
ABM/ABX20-NC	NPSF1/8	NPSF3/8	28	100
ABM/ABX30-C	G1/8	G3/8	35	112
ABM/ABX30-NC	NPSF1/8	NPSF3/8	35	112

Repair kits



ABM10-PK ABM20-PK



ABM30-PK

Item	Sealing kits model NBR	F	E	Model	Applicable vacuum generator
Sealing kits	ABM10-PK	ABM10-F-PK	ABM10-E-PK	-	ABM/ABX(5-10)
Sealing kits	ABM20-PK	ABM20-F-PK	ABM20-E-PK	-	ABM/ABX20
Sealing kits	ABM30-PK	ABM30-F-PK	ABM30-E-PK	-	ABM/ABX30
Vacuum filter	-	-	-	ZFL10	ABM/ABX(5-30)-B,NB,C,NC
Silencer	-	-	-	ZSA-G3M	ABM/ABX(5-30)-C,NC

ABM/ABX系列

迷你型组合式真空发生器

特点

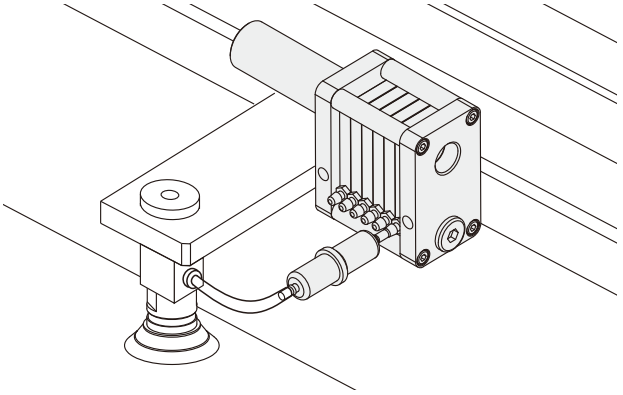
◇ 高效节能喷嘴设计
◇ 体积小，重量轻，结构紧凑，安装方便
◇ 可以用一个单一气动控制阀来操作，每一条真空回路都可由一个单独ABM/ABX控制并且不会影响其他线路的运行

优势

◇ 在较低耗气量条件下，产生更大真空流量
◇ 用于安装位置和重量有受限的工作场合
◇ 控制方便，在工况中多组分开应用时，能够单独控制每一个回路
◇ 不同工况，可以满足不同的真空流量需求

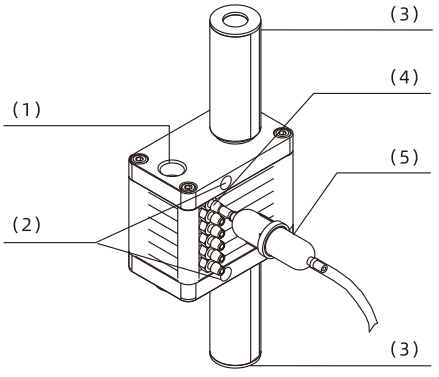
应用

◇ 通用的真空发生器，广泛应用于各类真空系统中
◇ 适用搬运金属板、包装机械、注塑和工业机器人技术领域



结构

◇（1）供气口
◇（2）安装孔
◇（3）消音器
◇（4）真空口
◇（5）真空过滤器



ABM/ABX Series

Mini Combined Type Vacuum Generator

How to order

ABM 5 × 5 - 4 - F
① ② ③ ④ ⑤

□ Series	□ Specification	□ Vacuum stack	④ Hose inner dia.at vacuum port	⑤ Sealing
ABM - Universal type(-85kPa)	5	2	4 - ϕ4mm	Nil - Default, NBR
ABX - High vacuum level type(-92kPa)	10	3		F - Fluorine rubber
		.....		E - EPDM
		16		

Selection

Model/ Specification	5	10
ABM□×2-4	ABM5×2-4	ABM10×2-4
ABM□×3-4	ABM5×3-4	ABM10×3-4
ABM□×4-4	ABM5×4-4	ABM10×4-4
ABM□×5-4	ABM5×5-4	ABM10×5-4
ABM□×6-4	ABM5×6-4	ABM10×6-4
ABM□×7-4	ABM5×7-4	ABM10×7-4
ABM□×8-4	ABM5×8-4	ABM10×8-4
ABM□×9-4	ABM5×9-4	ABM10×9-4
ABM□×10-4	ABM5×10-4	ABM10×10-4
ABM□×11-4	ABM5×11-4	ABM10×11-4
ABM□×12-4	ABM5×12-4	ABM10×12-4
ABM□×13-4	ABM5×13-4	ABM10×13-4
ABM□×14-4	ABM5×14-4	ABM10×14-4
ABM□×15-4	ABM5×15-4	ABM10×15-4
ABM□×16-4	ABM5×16-4	ABM10×16-4

Model/ Specification	5	10
ABX□×2-4	ABX5×2-4	ABX10×2-4
ABX□×3-4	ABX5×3-4	ABX10×3-4
ABX□×4-4	ABX5×4-4	ABX10×4-4
ABX□×5-4	ABX5×5-4	ABX10×5-4
ABX□×6-4	ABX5×6-4	ABX10×6-4
ABX□×7-4	ABX5×7-4	ABX10×7-4
ABX□×8-4	ABX5×8-4	ABX10×8-4
ABX□×9-4	ABX5×9-4	ABX5×9-4
ABX□×10-4	ABX5×10-4	ABX5×10-4
ABX□×11-4	ABX5×11-4	ABX5×11-4
ABX□×12-4	ABX5×12-4	ABX5×12-4
ABX□×13-4	ABX5×13-4	-
ABX□×14-4	ABX5×14-4	-
ABX□×15-4	ABX5×15-4	-
ABX□×16-4	ABX5×16-4	-

ABM/ABX Series

Mini Combined Type Vacuum Generator

Technical parameters

Model	Air supply pressure range bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Air consumption NL/min	Noise level dB(A)	Working temperature ℃	Weight g	Recommended hose dia. (mm) Air supply port P	Vacuum port V	Exhaust port E
ABM5×2-4	4.5~6.0	85	25×2	29~41	50~60	-20~80	67	ϕ6	ϕ6	G3/8×1
ABM5×3-4	4.5~6.0	85	25×3	44~64	50~60	-20~80	80	ϕ6	ϕ6	G3/8×1
ABM5×4-4	4.5~6.0	85	25×4	61~85	50~60	-20~80	247	ϕ8	ϕ6	G3/8×1
ABM5×5-4	4.5~6.0	85	25×5	71~104	60~65	-20~80	255	ϕ8	ϕ6	G3/8×1
ABM5×6-4	4.5~6.0	85	25×6	89~125	60~65	-20~80	281	ϕ8	ϕ6	G3/8×1
ABM5×7-4	4.5~6.0	85	25×7	104~145	60~65	-20~80	299	ϕ8	ϕ6	G3/8×1
ABM5×8-4	4.5~6.0	85	25×8	120~168	60~65	-20~80	317	ϕ10	ϕ6	G3/8×1
ABM5×9-4	4.5~6.0	85	25×9	132~190	60~65	-20~80	335	ϕ10	ϕ6	G3/8×1
ABM5×10-4	4.5~6.0	85	25×10	148~211	60~65	-20~80	353	ϕ10	ϕ6	G3/8×1
ABM5×11-4	4.5~6.0	85	25×11	165~232	60~65	-20~80	371	ϕ10	ϕ6	G3/8×1
ABM5×12-4	4.5~6.0	85	25×12	180~252	60~65	-20~80	389	ϕ10	ϕ6	G3/8×2
ABM5×13-4	4.5~6.0	85	25×13	195~275	60~65	-20~80	417	ϕ10	ϕ6	G3/8×2
ABM5×14-4	4.5~6.0	85	25×14	208~293	60~65	-20~80	435	ϕ10	ϕ6	G3/8×2
ABM5×15-4	4.5~6.0	85	25×15	225~316	60~65	-20~80	453	ϕ12	ϕ6	G3/8×2
ABM5×16-4	4.5~6.0	85	25×16	241~335	60~65	-20~80	471	ϕ12	ϕ6	G3/8×2
ABM10×2-4	4.5~6.0	85	32×2	61~85	55~60	-20~80	67	ϕ8	ϕ6	G3/8×1
ABM10×3-4	4.5~6.0	85	32×3	91~125	60~65	-20~80	80	ϕ8	ϕ6	G3/8×1
ABM10×4-4	4.5~6.0	85	32×4	121~167	60~65	-20~80	247	ϕ10	ϕ6	G3/8×1
ABM10×5-4	4.5~6.0	85	32×5	151~212	60~65	-20~80	255	ϕ10	ϕ6	G3/8×1
ABM10×6-4	4.5~6.0	85	32×6	185~255	60~65	-20~80	281	ϕ10	ϕ6	G3/8×2
ABM10×7-4	4.5~6.0	85	32×7	211~295	60~65	-20~80	299	ϕ10	ϕ6	G3/8×2
ABM10×8-4	4.5~6.0	85	32×8	241~335	60~65	-20~80	327	ϕ10	ϕ6	G3/8×2
ABM10×9-4	4.5~6.0	85	32×9	271~376	60~65	-20~80	345	ϕ12	ϕ6	G3/8×2
ABM10×10-4	4.5~6.0	85	32×10	301~421	60~65	-20~80	363	ϕ12	ϕ6	G3/8×2
ABM10×11-4	4.5~6.0	85	32×11	332~463	60~65	-20~80	381	ϕ12	ϕ6	G3/8×2
ABM10×12-4	4.5~6.0	85	32×12	361~505	60~65	-20~80	399	ϕ12	ϕ6	G3/8×2

◇ Note: Max. air supply pressure is 7.0 bar

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
ABM5×1	6.0	20	25.0	15.0	12.5	11.0	10.0	7.5	5.5	2.0	0.6	-	85
ABM10×1	6.0	42	32.0	28.0	24.0	22.0	18.0	15.0	11.0	5.0	1.4	-	85

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
ABM5×1	6.0	20	0.20	0.59	1.10	1.58	2.40	3.52	5.30	10.30	-	85
ABM10×1	6.0	42	0.12	0.28	0.60	0.81	1.18	1.82	2.65	5.21	-	85

ABM/ABX Series

Mini Combined Type Vacuum Generator

Technical parameters

Model	Air supply pressure range bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Air consumption NL/min	Noise level dB(A)	Working temperature ℃	Weight g	Recommended hose dia. mm		
								Air supply port P	Vacuum port V	Exhaust port E
ABX5×2-4	4.5~6.0	92	23×2	43~49	55~60	-20~80	67	ϕ6	ϕ6	G3/8×1
ABX5×3-4	4.5~6.0	92	23×3	65~73	55~60	-20~80	80	ϕ6	ϕ6	G3/8×1
ABX5×4-4	4.5~6.0	92	23×4	85~96	60~63	-20~80	247	ϕ8	ϕ6	G3/8×1
ABX5×5-4	4.5~6.0	92	23×5	106~121	60~63	-20~80	255	ϕ8	ϕ6	G3/8×1
ABX5×6-4	4.5~6.0	92	23×6	130~144	60~63	-20~80	281	ϕ8	ϕ6	G3/8×1
ABX5×7-4	4.5~6.0	92	23×7	151~167	60~63	-20~80	299	ϕ8	ϕ6	G3/8×1
ABX5×8-4	4.5~6.0	92	23×8	173~193	60~63	-20~80	317	ϕ10	ϕ6	G3/8×1
ABX5×9-4	4.5~6.0	92	23×9	195~217	60~63	-20~80	335	ϕ10	ϕ6	G3/8×1
ABX5×10-4	4.5~6.0	92	23×10	215~241	60~63	-20~80	353	ϕ10	ϕ6	G3/8×1
ABX5×11-4	4.5~6.0	92	23×11	238~265	60~63	-20~80	371	ϕ10	ϕ6	G3/8×1
ABX5×12-4	4.5~6.0	92	23×12	260~289	60~63	-20~80	389	ϕ10	ϕ6	G3/8×2
ABX5×13-4	4.5~6.0	92	23×13	281~313	60~63	-20~80	417	ϕ10	ϕ6	G3/8×2
ABX5×14-4	4.5~6.0	92	23×14	335~346	60~63	-20~80	435	ϕ10	ϕ6	G3/8×2
ABX5×15-4	4.5~6.0	92	23×15	361~389	63~65	-20~80	453	ϕ10	ϕ6	G3/8×2
ABX5×16-4	4.5~6.0	92	23×16	346~385	63~65	-20~80	471	ϕ10	ϕ6	G3/8×2
ABX10×2-4	4.5~6.0	92	32×2	87~96	63~65	-20~80	67	ϕ8	ϕ6	G3/8×1
ABX10×3-4	4.5~6.0	92	32×3	130~145	63~65	-20~80	80	ϕ8	ϕ6	G3/8×1
ABX10×4-4	4.5~6.0	92	32×4	173~193	63~65	-20~80	247	ϕ10	ϕ6	G3/8×1
ABX10×5-4	4.5~6.0	92	32×5	215~241	63~65	-20~80	255	ϕ10	ϕ6	G3/8×1
ABX10×6-4	4.5~6.0	92	32×6	260~288	63~65	-20~80	281	ϕ10	ϕ6	G3/8×2
ABX10×7-4	4.5~6.0	92	32×7	303~337	63~65	-20~80	299	ϕ10	ϕ6	G3/8×2
ABX10×8-4	4.5~6.0	92	32×8	346~385	63~65	-20~80	327	ϕ10	ϕ6	G3/8×2
ABX10×9-4	4.5~6.0	92	32×9	389~433	63~65	-20~80	345	ϕ12	ϕ6	G3/8×2
ABX10×10-4	4.5~6.0	92	32×10	433~481	63~65	-20~80	363	ϕ12	ϕ6	G3/8×2
ABX10×11-4	4.5~6.0	92	32×11	476~529	63~65	-20~80	381	ϕ12	ϕ6	G3/8×2
ABX10×12-4	4.5~6.0	92	32×12	519~578	63~65	-20~80	399	ϕ12	ϕ6	G3/8×2

◇ Note: Max. air supply pressure is 7.0 bar.

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
ABX5×1	6.0	22	23.0	14.0	10.0	9.0	7.5	6.0	4.0	2.8	1.5	0.44	92
ABX10×1	6.0	40	32.0	21.0	18.0	16.0	14.0	11.0	9.5	5.5	2.5	1.10	92

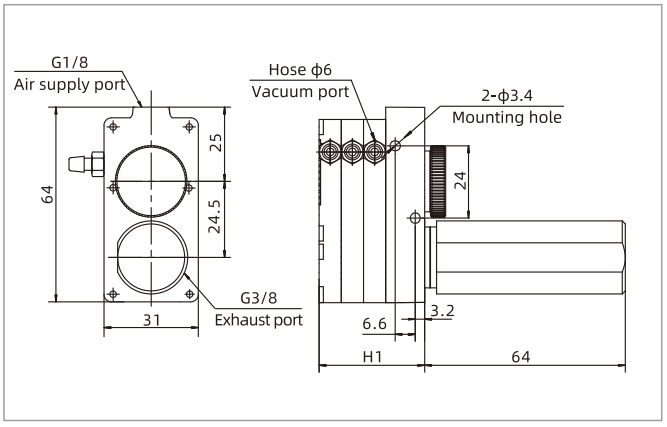
Evacuation time(s/L) to reach different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	90	Max. vacuum level -kPa
ABX5×1	6.0	22	0.21	0.81	1.52	2.35	3.48	4.85	6.57	10.50	19.30	92
ABX10×1	6.0	40	0.14	0.40	0.78	1.22	1.77	2.40	3.30	4.95	9.62	92

ABM/ABX Series

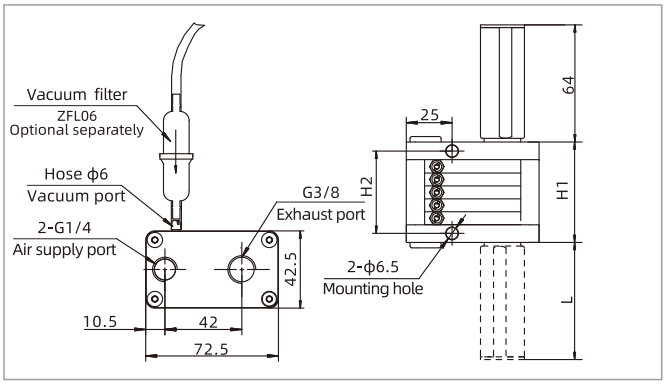
Mini Combined Type Vacuum Generator

Dimensions(mm)



ABM/ABX□×2-4 ABM/ABX□×3-4

Model/size	H1	H2	L
ABM/ABX5×2-4	28	-	-
ABM/ABX5×3-4	36	-	-
ABM/ABX5×4-4	50.5	40.5	-
ABM/ABX5×5-4	58	48	-
ABM/ABX5×6-4	65.5	55.5	-
ABM/ABX5×7-4	73	63	-
ABM/ABX5×8-4	80	70	-
ABM/ABX5×9-4	87.5	77.5	-
ABM/ABX5×10-4	95	85	-
ABM/ABX5×11-4	102.5	92.5	-
ABM/ABX5×12-4	110	100	64
ABM/ABX5×13-4	117.5	107.5	64
ABM/ABX5×14-4	125	115	64
ABM/ABX5×15-4	132.5	122.5	64
ABM/ABX5×16-4	140	130	64



ABM/ABX□× (4-8)-4

Model/size	H1	H2	L
ABM/ABX10×2-4	28	-	-
ABM/ABX10×3-4	36	-	-
ABM/ABX10×4-4	50.5	40.5	-
ABM/ABX10×5-4	58	48	-
ABM/ABX10×6-4	65.5	55.5	-
ABM/ABX10×7-4	73	63	-
ABM/ABX10×8-4	80	70	-
ABM/ABX10×9-4	87.5	77.5	-
ABM/ABX10×10-4	95	85	-
ABM/ABX10×11-4	102.5	92.5	-
ABM/ABX10×12-4	110	100	64

Repair kits

Item	Model
Vacuum filter	ZFL06
Silencer	ZSA-G3M

AMC Series

Multistage Vacuum Generator

METAL SHEET | PACKAGING | WOOD | COMPOSITE MATERIAL

RoHS

Features

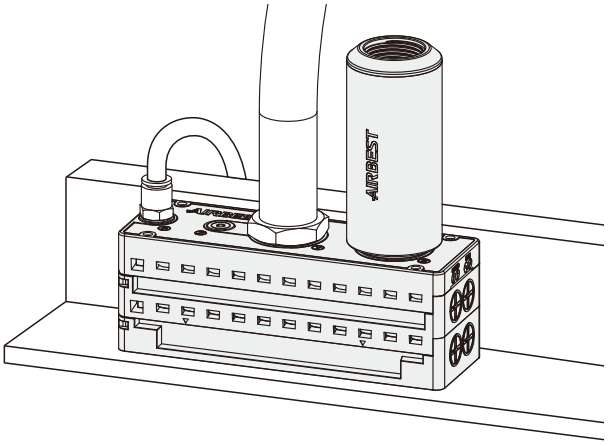
◇ High efficient and energy-saving multistage nozzle design
◇ Large vacuum flow
◇ Internal vacuum cartridges can be stacked assembly
◇ Various specifications of air supply port and vacuum port
◇ Energy-saving control device is optional

Advantages

◇ Quick evacuation in low vacuum level range, reduce cost and shorten working cycle
◇ Producing large vacuum flow to handle porous workpieces fast and safely
◇ It can meet different requirements of vacuum flow in different working conditions
◇ It can be connected with different threads
◇ It is energy-saving when handling airtight workpieces

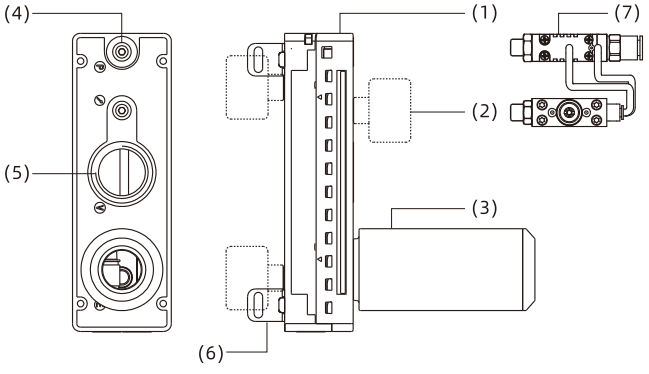
Applications

◇ The multistage vacuum generator is suitable for handling cartons, packaging materials and porous materials
◇ It is used in the working condition requiring large vacuum flow, fast evacuation speed and less air consumption



Structure

◇ (1) Main body
◇ (2) Vacuum gauge
◇ (3) Silencer
◇ (4) Air supply port
◇ (5) Vacuum port
◇ (6) L-type mounting bracket
◇ (7) ES energy saving system



AMC Series

Multistage Vacuum Generator

How to order

AMC 25 L - AA - V - ES
① ② ③ ④ ⑤ ⑥

□ Series	□ Specification	□ Performance	④ Connection plate	⑤ Non-return valve	⑥ Control device
AMC	25	H - High vacuum level (-95kPa)	AA	Nil - Default, without non-return valve	Nil - Default, Without control device
	50		BA		ES - Energy saving system
	75	L - Large vacuum flow (-75kPa)	CA	V - With non-return valve	
	100		DB		
	125		CC		
	150				

Connection plate specifications

Connection plate	Air supply port (1)	Vacuum port (2)	Exhaust port (3)	Applicable vacuum generator
AA	G1/8	G3/4	G1"	AMC25, 50
BA	NPSF1/8	G3/4	G1"	AMC25, 50
CA	G1/4	G3/4	G1"	AMC25, 50, 75, 100
DB	NPT1/4	NPT3/4	G1"	AMC25, 50, 75, 100
CC	G1/4	G1"	G1"	AMC25, 50, 75, 100, 125, 150

Selection - L (Large Vacuum flow type)

Model/ Specification	25	50	75	100	125	150
AMC□L-AA	AMC25L-AA	AMC50L-AA	-	-	-	-
AMC□L-AA-V	AMC25L-AA-V	AMC50L-AA-V	-	-	-	-
AMC□L-AA-V-ES	AMC25L-AA-V-ES	AMC50L-AA-V-ES	-	-	-	-
AMC□L-BA	AMC25L-BA	AMC50L-BA	-	-	-	-
AMC□L-BA-V	AMC25L-BA-V	AMC50L-BA-V	-	-	-	-
AMC□L-CA	AMC25L-CA	AMC50L-CA	AMC75L-CA	AMC100L-CA	-	-
AMC□L-CA-V	AMC25L-CA-V	AMC50L-CA-V	AMC75L-CA-V	AMC100L-CA-V	-	-
AMC□L-CA-V-ES	-	-	AMC75L-CA-V-ES	AMC100L-CA-V-ES	-	-
AMC□L-DB	AMC25L-DB	AMC50L-DB	AMC75L-DB	AMC100L-DB	-	-
AMC□L-DB-V	AMC25L-DB-V	AMC50L-DB-V	AMC75L-DB-V	AMC100L-DB-V	-	-
AMC□L-CC	AMC25L-CC	AMC50L-CC	AMC75L-CC	AMC100L-CC	AMC125L-CC	AMC150L-CC
AMC□L-CC-V	AMC25L-CC-V	AMC50L-CC-V	AMC75L-CC-V	AMC100L-CC-V	AMC125L-CC-V	AMC150L-CC-V
AMC□L-CC-V-ES	AMC25L-CC-V-ES	AMC50L-CC-V-ES	AMC75L-CC-V-ES	AMC100L-CC-V-ES	AMC125L-CC-V-ES	AMC150L-CC-V-ES

AMC Series

Multistage Vacuum Generator

Selection - H（High vacuum level type）

Model/ Specification	25	50	75	100	125	150
AMC□H-AA	AMC25H-AA	AMC50H-AA	-	-	-	-
AMC□H-AA-V	AMC25H-AA-V	AMC50H-AA-V	-	-	-	-
AMC□H-AA-V-ES	AMC25H-AA-V-ES	AMC50H-AA-V-ES	-	-	-	-
AMC□H-BA	AMC25H-BA	AMC50H-BA	-	-	-	-
AMC□H-BA-V	AMC25H-BA-V	AMC50H-BA-V	-	-	-	-
AMC□H-CA	AMC25H-CA	AMC50H-CA	AMC75H-CA	AMC100H-CA	-	-
AMC□H-CA-V	AMC25H-CA-V	AMC50H-CA-V	AMC75H-CA-V	AMC100H-CA-V	-	-
AMC□H-CA-V-ES	-	-	AMC75H-CA-V-ES	AMC100H-CA-V-ES	-	-
AMC□H-DB	AMC25H-DB	AMC50H-DB	AMC75H-DB	AMC100H-DB	-	-
AMC□H-DB-V	AMC25H-DB-V	AMC50H-DB-V	AMC75H-DB-V	AMC100H-DB-V	-	-
AMC□H-CC	AMC25H-CC	AMC50H-CC	AMC75H-CC	AMC100H-CC	AMC125H-CC	AMC150H-CC
AMC□H-CC-V	AMC25H-CC-V	AMC50H-CC-V	AMC75H-CC-V	AMC100H-CC-V	AMC125H-CC-V	AMC150H-CC-V
AMC□H-CC-V-ES	AMC25H-CC-V-ES	AMC50H-CC-V-ES	AMC75H-CC-V-ES	AMC100H-CC-V-ES	AMC125H-CC-V-ES	AMC150H-CC-V-ES

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 ℃	Weight g	Vacuum chamber volume cm^3	Recommended hose dia. mm	
									Air supply port P	Vacuum port V
AMC25L	6.0	75	360	130	63~68	-10~80	430	140	ϕ8	ϕ25
AMC50L	6.0	75	710	260	63~68	-10~80	435	140	ϕ8	ϕ25
AMC75L	6.0	75	1,050	390	63~68	-10~80	625	245	ϕ10	ϕ32
AMC100L	6.0	75	1,410	520	63~68	-10~80	630	245	ϕ10	ϕ32
AMC125L	6.0	75	1,500	650	63~68	-10~80	825	352	ϕ12	ϕ32
AMC150L	6.0	75	1,690	780	63~68	-10~80	830	352	ϕ12	ϕ32
AMC25H	5.0	95	354	135	63~68	-10~80	430	140	ϕ8	ϕ25
AMC50H	5.0	95	700	270	63~68	-10~80	435	140	ϕ8	ϕ25
AMC75H	5.0	95	980	405	63~68	-10~80	625	245	ϕ10	ϕ32
AMC100H	5.0	95	1,380	540	63~68	-10~80	630	245	ϕ10	ϕ32
AMC125H	5.0	95	1,480	675	63~68	-10~80	825	352	ϕ12	ϕ32
AMC150H	5.0	95	1,650	810	63~68	-10~80	830	352	ϕ12	ϕ32

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

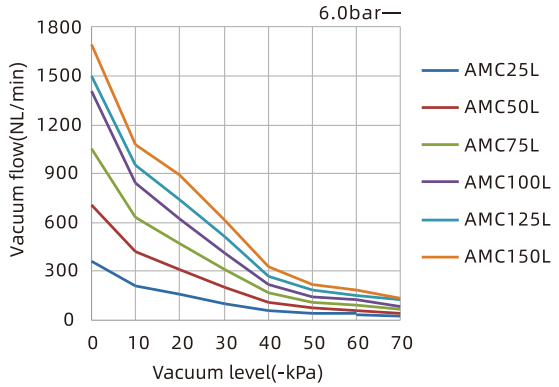
Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	Max. vacuum level -kPa
AMC25L	6.0	130	360	210	156	102	54	36	30	21	75
AMC50L	6.0	260	710	420	312	204	108	72	60	42	75
AMC75L	6.0	390	1,050	630	468	306	162	108	90	66	75
AMC100L	6.0	520	1,410	840	624	408	216	144	120	84	75
AMC125L	6.0	650	1,500	948	744	510	270	180	150	126	75
AMC150L	6.0	780	1,690	1,074	888	612	324	216	180	132	75

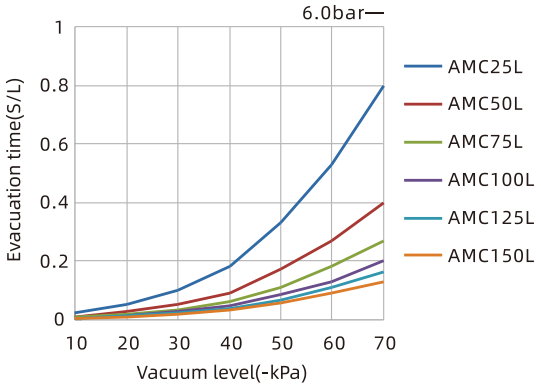
AMC Series

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
AMC25L	6.0	130	0.020	0.050	0.100	0.180	0.330	0.530	0.800	75
AMC50L	6.0	260	0.010	0.025	0.050	0.090	0.170	0.270	0.400	75
AMC75L	6.0	390	0.007	0.017	0.033	0.060	0.110	0.180	0.270	75
AMC100L	6.0	520	0.005	0.013	0.025	0.045	0.083	0.130	0.200	75
AMC125L	6.0	650	0.005	0.012	0.022	0.036	0.066	0.110	0.160	75
AMC150L	6.0	780	0.004	0.010	0.018	0.030	0.055	0.090	0.130	75





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

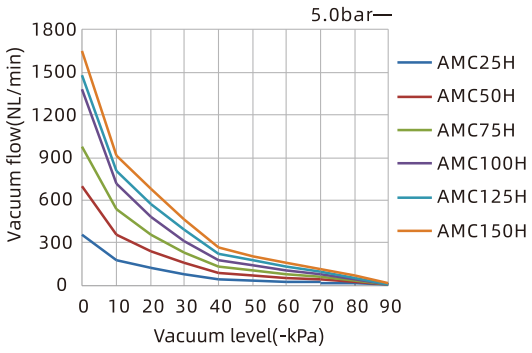
Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	90	Max. vacuum level -kPa
AMC25H	5.0	135	354	180	120	78	43.8	34.8	25.8	19.2	10.8	1.8	95
AMC50H	5.0	270	700	360	240	156	87.6	69.6	51.6	38.4	21.6	3.6	95
AMC75H	5.0	405	980	540	360	234	131.4	104.4	77.4	57.6	32.4	5.4	95
AMC100H	5.0	540	1,380	720	480	312	175.2	139.2	103.2	76.8	43.2	7.2	95
AMC125H	5.0	675	1,480	810	570	390	219.0	174.0	129.0	96.0	54.0	9.0	95
AMC150H	5.0	810	1,650	918	684	468	262.8	206.4	154.8	115.2	64.8	10.8	95

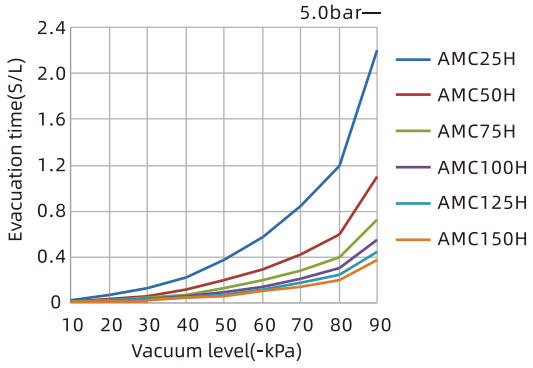
Evacuation time(s/L) to reach different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	90	Max. vacuum level -kPa
AMC25H	5.0	135	0.022	0.062	0.120	0.220	0.37	0.57	0.84	1.20	2.20	95
AMC50H	5.0	270	0.011	0.031	0.060	0.110	0.19	0.29	0.42	0.60	1.10	95
AMC75H	5.0	405	0.007	0.021	0.040	0.070	0.12	0.19	0.28	0.40	0.73	95
AMC100H	5.0	540	0.006	0.016	0.030	0.055	0.09	0.14	0.21	0.30	0.55	95
AMC125H	5.0	675	0.005	0.014	0.026	0.044	0.07	0.11	0.17	0.24	0.44	95
AMC150H	5.0	810	0.005	0.012	0.022	0.040	0.06	0.10	0.14	0.20	0.37	95

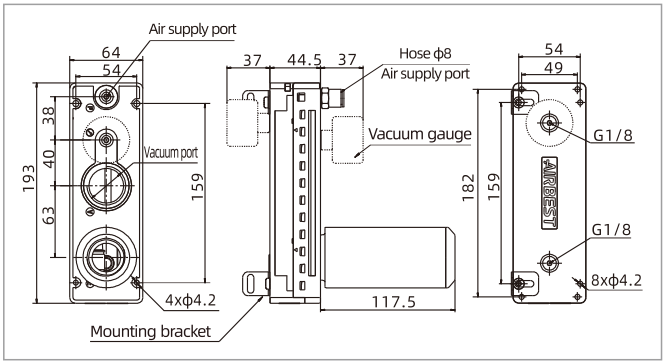
AMC Series

Multistage Vacuum Generator

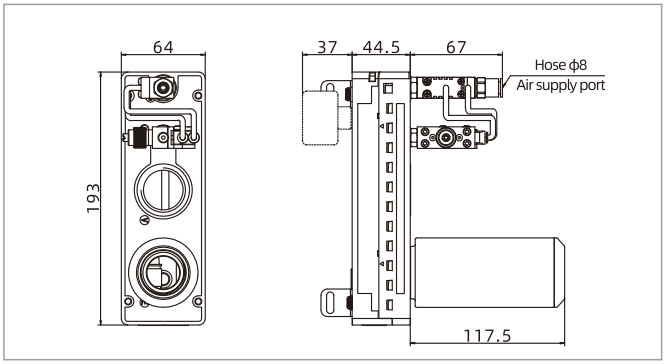




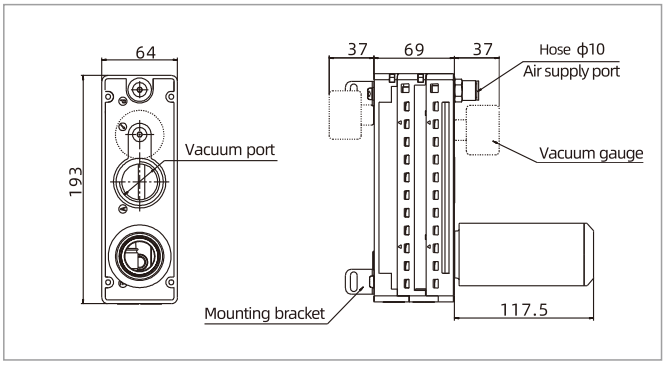
Dimensions(mm)



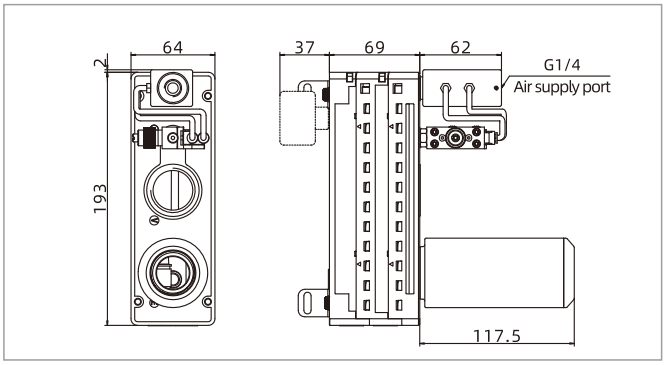
AMC25-50



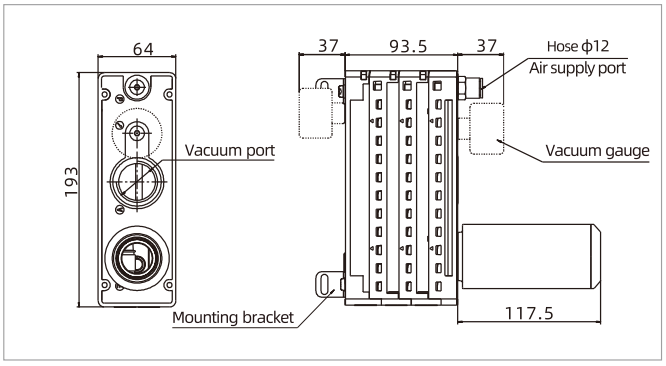
AMC25□-□-V-ES AMC50□-□-V-ES



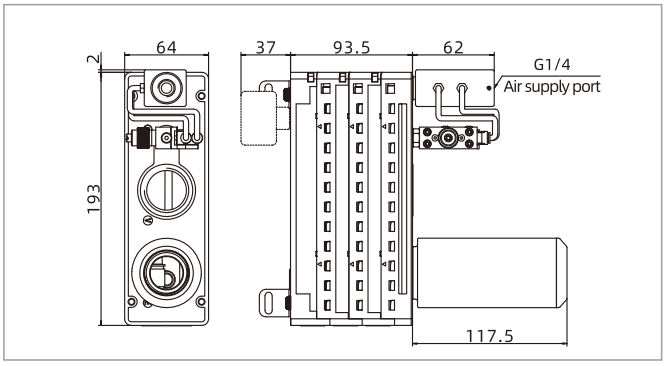
AMC75 -100



AMC75□-□-V-ES AMC100□-□-V-ES

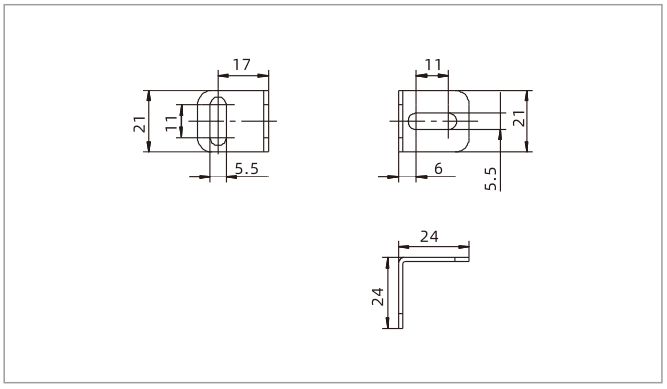


AMC125-150



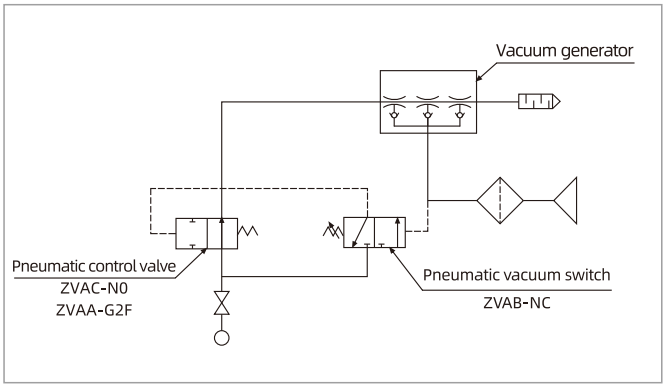
AMC125□-□-V-ES AMC150□-□-V-ES

Dimensions(mm)



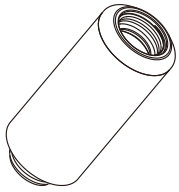
L type mounting bracket

Air circuit schematic diagram



ES Energy saving system

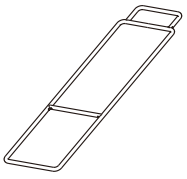
Accessory selection



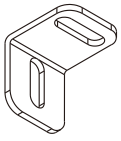
Silencer

Vacuum gauge

Mounting accessories



Sealing parts



L type mounting bracket

Mounting accessories

Item	Model	Remark
Silencer	ZSA-G8M	-
Vacuum gauge	ZPMR-V	-
Sealing ring	AMC50-R6	AMC25, 50/1 AMC75, 100/2 AMC125, 150/3
Mounting accessory kit	AMC50-R(2 brackets + 4 Screws + 1 ϕ8 one-touch fitting)	AMC25, 50-AA
Mounting accessory kit	AMC100-R(2 brackets+ 4 Screws + 1 ϕ10 one-touch fitting)	AMC25, 50, 75, 100-CA / AMC25, 50, 75, 100-CC
Mounting accessory kit	AMC150-R(2 brackets + 4 Screws + 1 ϕ12 one-touch fitting)	AMC125, 150-CC

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

AM/AL/AH Series

Multistage Vacuum Generator

METAL SHEET | PACKAGING | WOOD | COMPOSITE MATERIAL

RoHS

Features

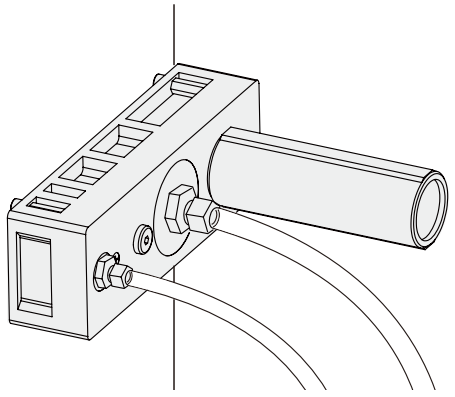
◇ Energy-efficient multistage nozzle design
◇ It has a very strong suction capacity
◇ A variety of specifications of air supply port and vacuum port
◇ Energy-saving system(ES) is optional

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

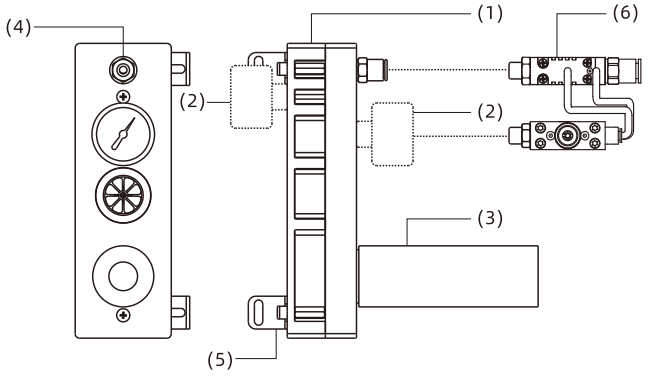
Applications

◇ 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



AM/AL/AH系列
多级真空发生器

AIRBEST

选型规格 - AL系列

型号/规格	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

选型规格 - AH系列

型号/规格	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

性能参数

产品型号	额定供气压力 bar	最大真空度 -kPa	最大真空流量 NL/min	空气耗气量 NL/min	噪音 dB(A)	工作温度 ℃	单重 g	推荐软管直径mm (软管外径) 供气口	推荐软管直径mm (钢丝管内径) 真空口
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

AM/AL/AH系列
多级真空发生器

型号规格

AM 25L - AD - N - A - ES
① ② ③ ④ ⑤ ⑥

① 产品系列	② 规格	③ 连接板规格	④ 密封件材质	⑤ 止回阀选型	⑥ 控制装置
AM - 基本型 (-92kPa)	25L 50L 75L 100L 125L 150L	D B AD E (见附表一)	N - 丁腈橡胶 E - 三元乙丙橡胶 F - 氟橡胶	空白 - 默认规格，无止回阀 A - 带止回阀	空白 - 默认规格，无控制装置 ES - 节能系统 只适用于AM-25L/50L AL-25/50 AH-40
AL - 流量型 (-81kPa)	25 50 75 100 125 150				
AH - 高真空型 (-100.8kPa)	40 120				

连接板规格附表一

连接板规格	供气口 (1)	真空口 (2)	排气口 (3)	连接板材质	适合发生器型号
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	铝合金	
E	NPT1/4	NPT3/4	NPT3/4	铝合金	
D	G1/4	G1"	G1"	PPS	AM125-150、AL125-150
B	NPT1/4	NPT1"	NPT1"	PPS	
AD	G1/4	G1"	G1"	铝合金	
E	NPT1/4	NPT1"	NPT1"	铝合金	

选型规格 - AM系列

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

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

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
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 ℃	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

AM/AL/AH Series

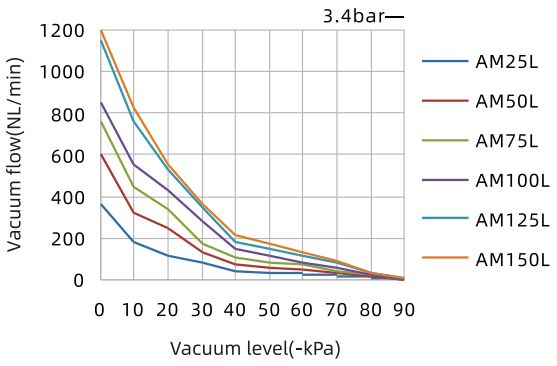
Multistage Vacuum Generator

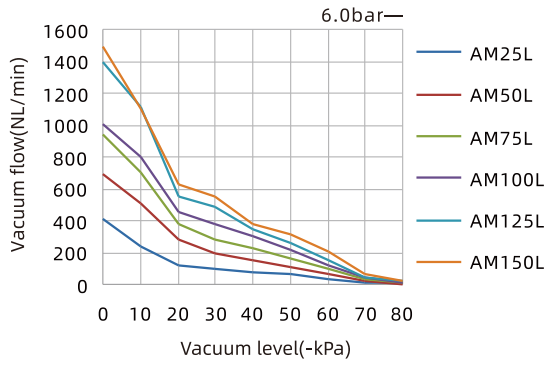
Technical parameters

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 ℃	Weight g	Recommended hose dia. mm (Hose outer dia.) Air supply port	(Wired hose inner dia.) 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)

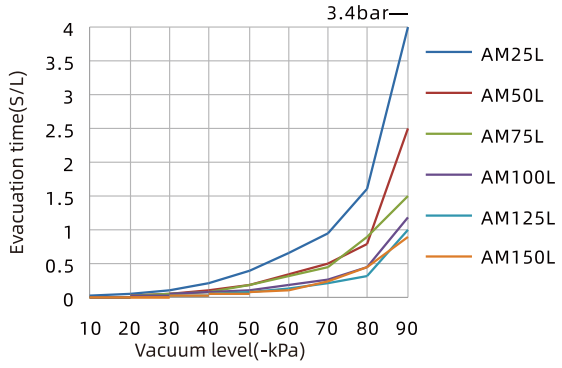
Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	90	Max. vacuum level -kPa
AM25L	3.4	116	360	180	115	80	43	30	22.5	15.5	7.5	21.2	92
AM50L	3.4	230	600	320	250	135	75	60	46	30	13	1.5	92
AM75L	3.4	365	760	445	340	175	110	85	70	43	20	1.8	92
AM100L	3.4	445	850	550	430	280	145	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

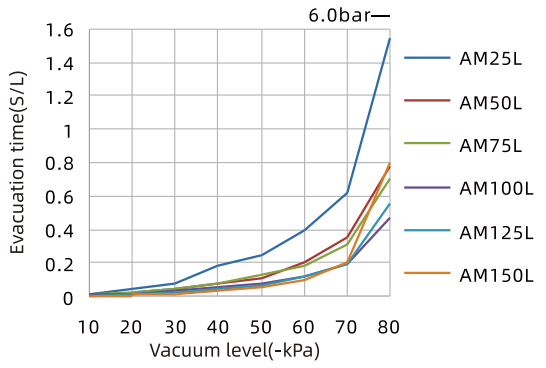




Evacuation time(s/L) to reach different vacuum levels(-kPa)

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	0.018	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



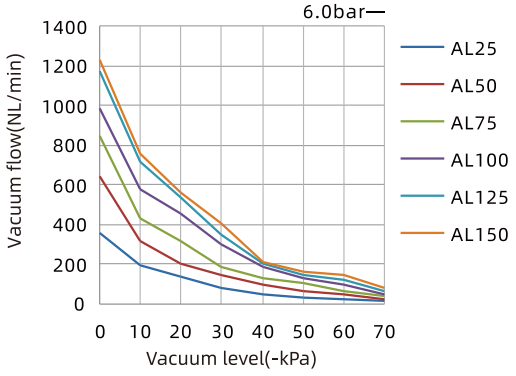


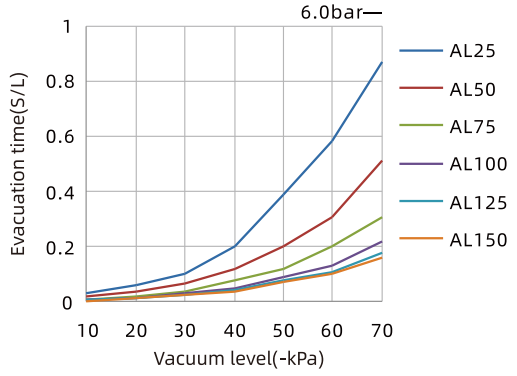
Vacuum flow(NL/min) at different vacuum levels(-kPa)

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

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



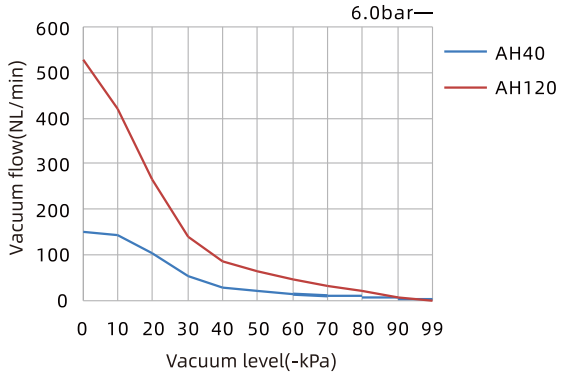


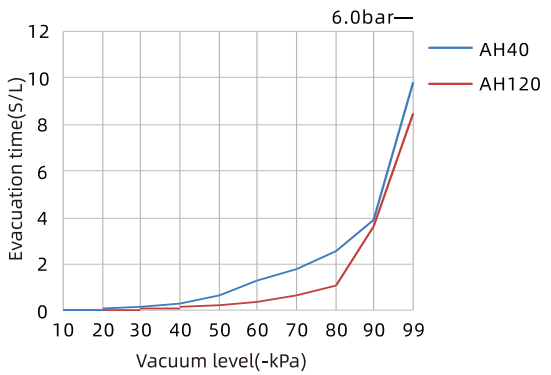
Vacuum flow(NL/min) at different vacuum levels(-kPa)

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

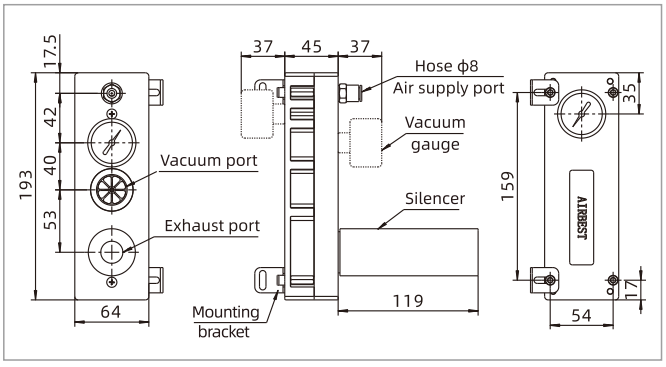
Evacuation time(s/L) to reach different vacuum levels(-kPa)

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

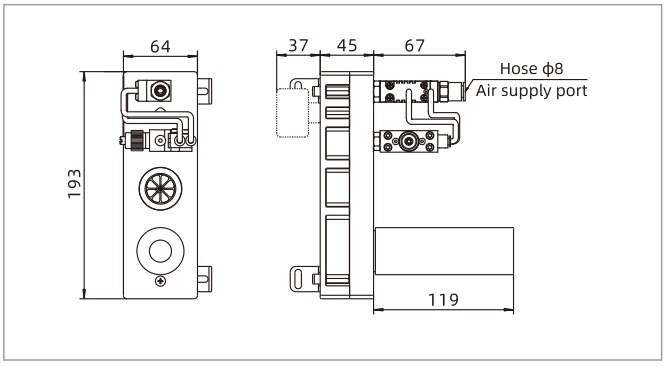




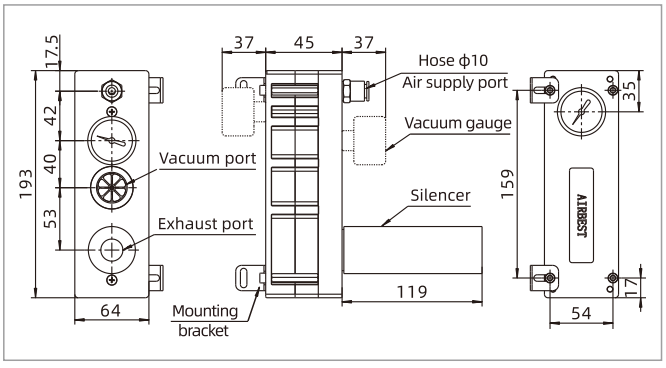
Dimensions(mm)



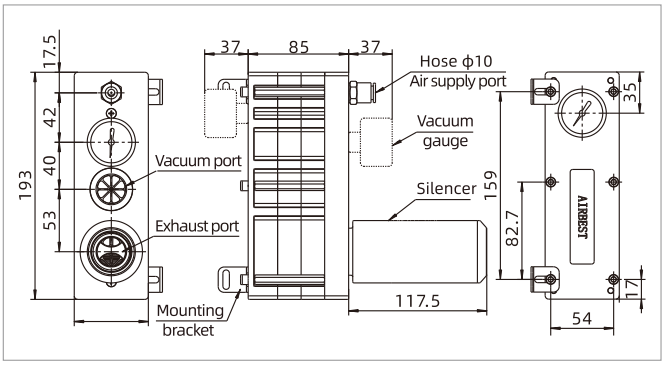
AM/AL25-50 AH40



AM/AL25-50-□-N-A-ES



AM/AL75-100

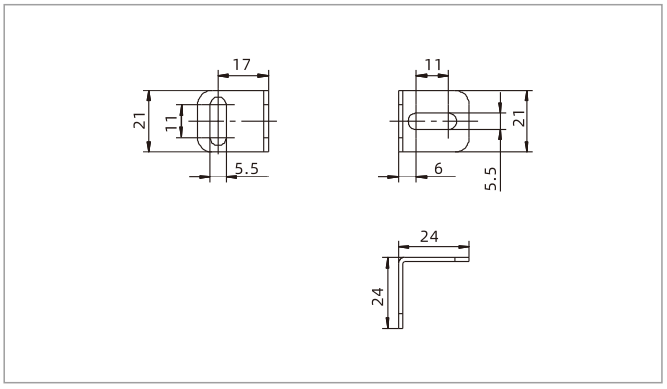


AM/AL125-150

AM/AL/AH Series

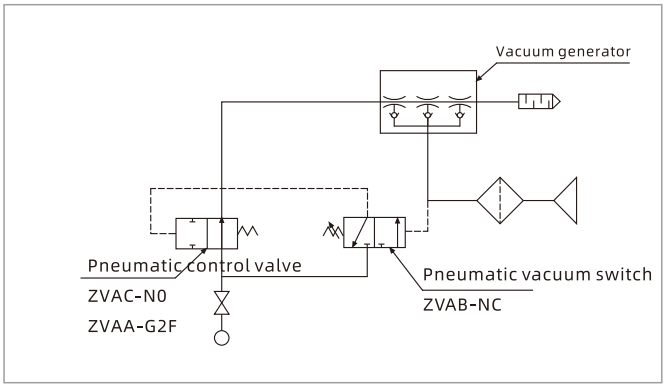
Multistage Vacuum Generator

Dimensions(mm)



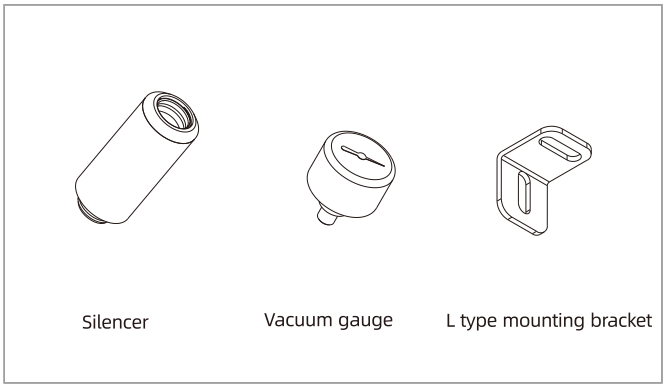
L type mounting bracket

Air circuit schematic diagram

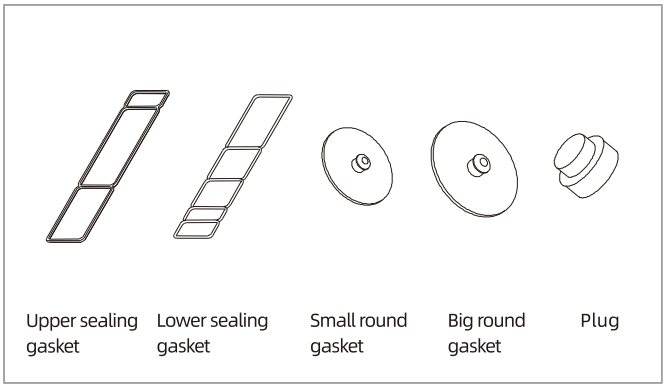


ES Energy-saving system

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（1Upper sealing gasket+1 Lower sealing gasket+2 Small round gaskets+2 Plugs)	AM25-50, AL25-50, AH40
Mounting accessory kit	AM50L-D-R （2 brackets+4 screws+1 G1/8 ϕ8 one-touch fitting)	AM25-50, AL25-50, Ah40
Mounting accessory kit	AM50L-E-R （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-R （2 brackets+4 screws+1 G1/8 ϕ10 one-touch fitting)	AM75-100, AL75-100, AH120
Mounting accessory kit	AM100L-E-R （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（1Upper 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

AMD Series

Large Flow Vacuum Generator

UNIVERSAL

Features

◇ Built-in vacuum cartridge, greatly improve the energy consumption ratio

◇ Suitable connection specifications can be configured according to different vacuum flow requirements

◇ Various connection specifications can meet different requirements

Advantages

◇ Easy installation, easy maintenance, it can be replaced by users themselves

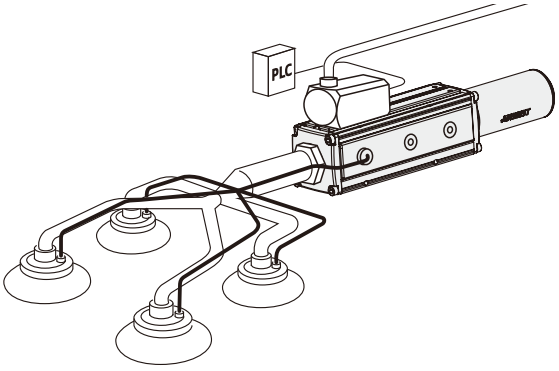
◇ Various connection specifications can meet different customized requirements

◇ Multistage vacuum generator, the housing is made of aluminum alloy

Applications

◇ Suitable for multi-station vacuum grasping applications

◇ Suitable for vacuum evacuation occasions in pharmaceutical and food industry



Structure

◇ (1) Vacuum port

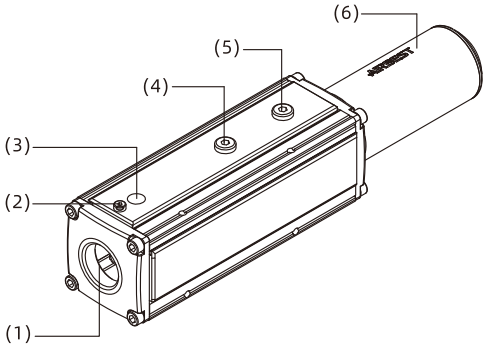
◇ (2) Release port

◇ (3) Air supply port

◇ (4) Vacuum port

◇ (5) Exhaust port

◇ (6) Silencer



AMD Series

Large Flow Vacuum Generator

How to order

AMD - S 3 - LG8 - G8

① ② ③ ④ ⑤

① Series	② Performance	③ Specification	④ Connection plate specification	⑤ Vacuum port specification
AMD	X - High vacuum level	1	LG8 - Straight exhaust, Air supply port: G1/4	G8 - Vacuum port G1
	S - Large vacuum flow	2	Vacuum detecting port: G1/8,	G6 - Vacuum port G3/4
		3	Exhaust detecting port: G1	
		4	LG6 - Side exhaust, Air supply port: G1/4	
			Vacuum detecting port: G1/8,	
			Exhaust port: G3/4	

Technical parameters

Model	Air supply pressure range bar	Working temperature ℃	Rated 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 (Hose outer dia.) Air supply port	(Wired hose inner dia.) Vacuum port
AMD-X1	4.0~7.0	-10~80	5.0	95	354	130	63~72	≥ϕ8	≥ϕ25
AMD-X2	4.0~7.0	-10~80	5.0	95	700	260	63~72	≥ϕ8	≥ϕ25
AMD-X3	4.0~7.0	-10~80	5.0	95	980	390	63~72	≥ϕ10	≥ϕ45
AMD-X4	4.0~7.0	-10~80	5.0	95	1,380	520	63~72	≥ϕ10	≥ϕ45
AMD-S1	4.0~7.0	-10~80	6.0	75	360	135	63~72	≥ϕ8	≥ϕ32
AMD-S2	4.0~7.0	-10~80	6.0	75	710	270	63~72	≥ϕ8	≥ϕ32
AMD-S3	4.0~7.0	-10~80	6.0	75	1,050	405	63~72	≥ϕ10	≥ϕ45
AMD-S4	4.0~7.0	-10~80	6.0	75	1,410	540	63~72	≥ϕ10	≥ϕ45

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

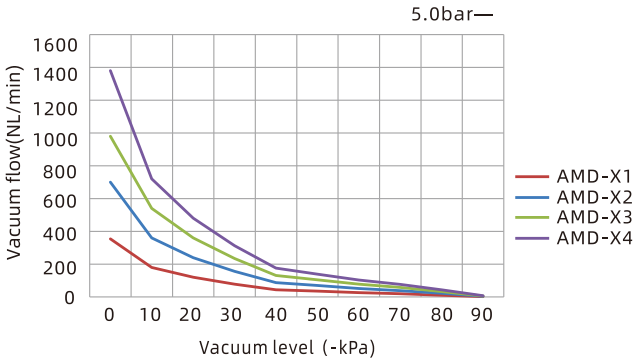
Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	90	Max. vacuum level -kPa
AMD-X1	5.0	135	354	180	120	78	43.8	34.8	25.8	19.2	10.8	1.8	95
AMD-X2	5.0	270	700	360	240	156	87.6	69.6	51.6	38.4	21.6	3.6	95
AMD-X3	5.0	405	980	540	360	234	131.4	104.4	77.4	57.6	32.4	5.4	95
AMD-X4	5.0	540	1,380	720	480	312	175.2	139.2	103.2	76.8	43.2	7.2	95
AMD-S1	6.0	130	360	210	156	102	54	36	30	21	-	-	75
AMD-S2	6.0	260	710	420	312	204	108	72	60	42	-	-	75
AMD-S3	6.0	390	1,050	630	468	306	162	108	90	66	-	-	75
AMD-S4	6.0	520	1,410	840	624	408	216	144	120	84	-	-	75

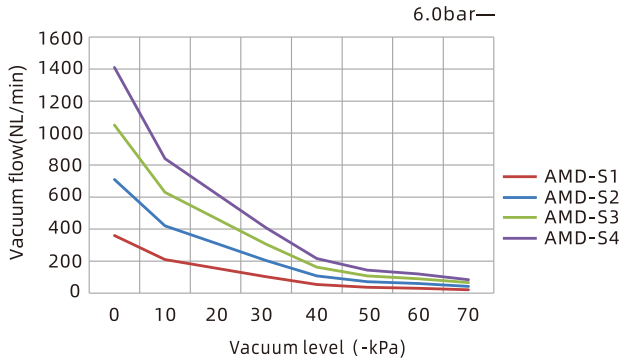
AMD Series

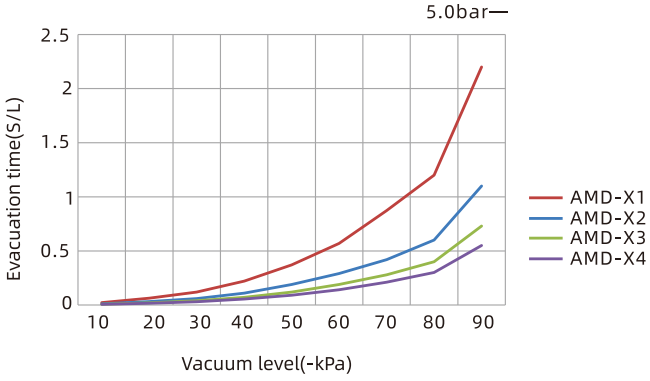
Large Flow Vacuum Generator

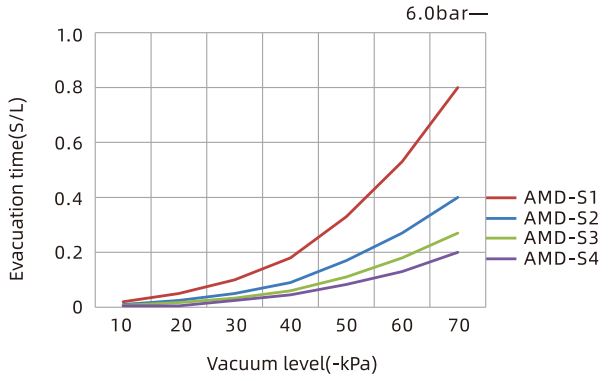
Evacuation time(s/L) to reach different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	90	Max. Vacuum level -kPa
AMD-X1	5.0	135	0.022	0.063	0.12	0.22	0.37	0.57	0.874	1.2	2.2	95
AMD-X2	5.0	270	0.011	0.031	0.06	0.11	0.19	0.29	0.42	0.6	1.1	95
AMD-X3	5.0	405	0.007	0.021	0.04	0.07	0.12	0.19	0.28	0.4	0.73	95
AMD-X4	5.0	540	0.006	0.016	0.03	0.055	0.09	0.14	0.21	0.3	0.55	95
AMD-S1	6.0	130	0.02	0.05	0.1	0.18	0.33	0.53	0.8	-	-	75
AMD-S2	6.0	260	0.01	0.025	0.05	0.09	0.17	0.27	0.4	-	-	75
AMD-S3	6.0	390	0.007	0.017	0.033	0.06	0.11	0.18	0.27	-	-	75
AMD-S4	6.0	520	0.005	0.005	0.025	0.045	0.083	0.13	0.2	-	-	75





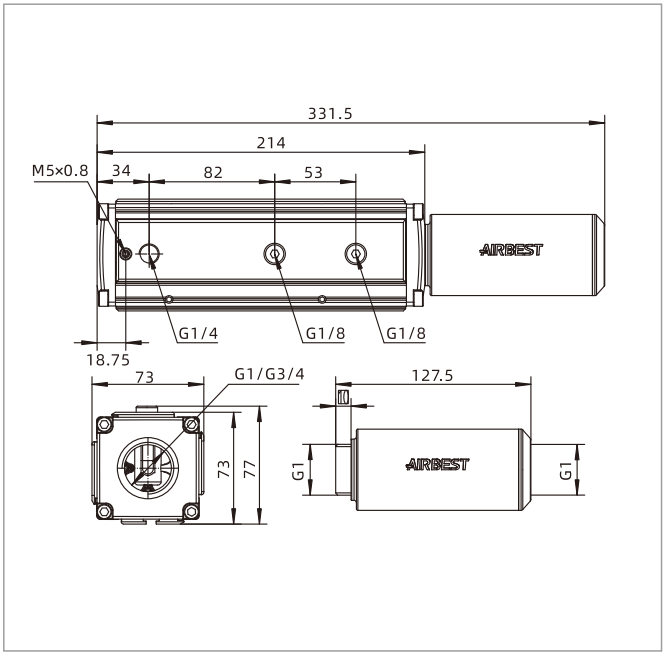




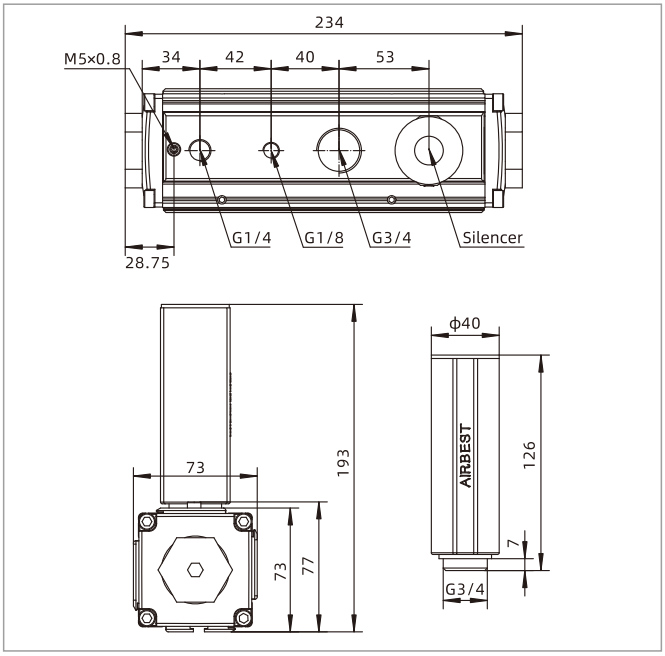
AMD Series

Large Flow Vacuum Generator

Dimensions(mm)

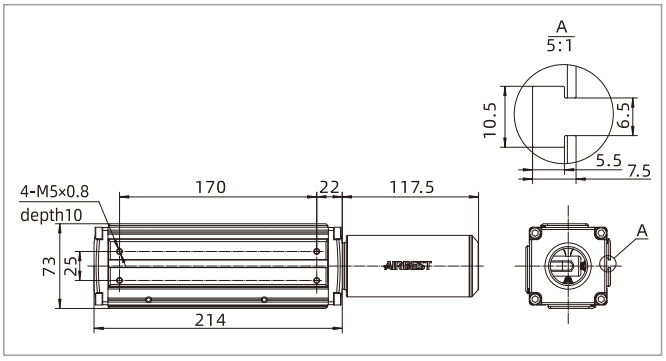


AMD-□-LG8-□ type (Straight exhaust)



AMD-□-LG6-□ type (Side exhaust)

Mounting dimensions(mm)



AZR Series

Mini Vacuum Generator

ELECTRONICS PLASTIC

RoHS

Features

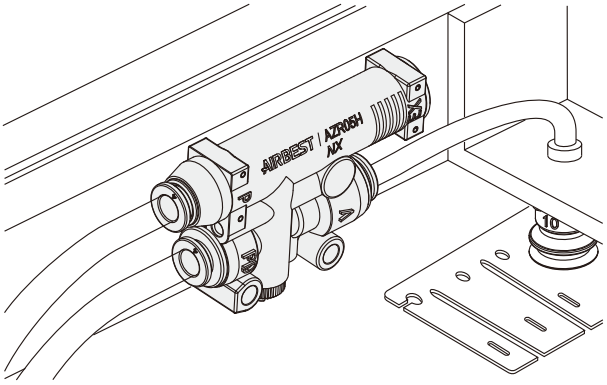
◇ Small size, light weight
◇ High vacuum level type and large vacuum flow type are optional
◇ The generator has vacuum breaking function itself
◇ Separate vacuum filter and mounting bracket are optional

Advantages

◇ For the occasions with limited installation space and weight
◇ It can meet different requirements of vacuum flow in different working conditions
◇ There is no need for external control device, can quickly release the product
◇ Customers can choose freely according to the actual working conditions

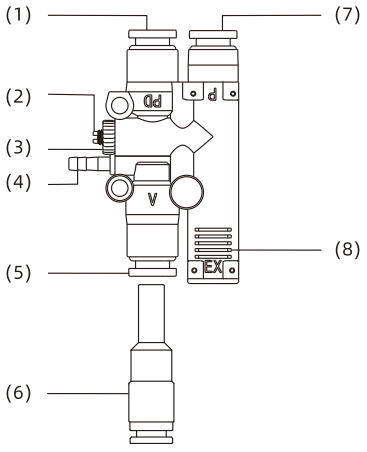
Applications

◇ Suitable for handling electronic components and other small workpieces
◇ Suitable for working occasions where quick picking and quick release are required



Structure

◇ (1) Release port
◇ (2) Vacuum release regulating valve
◇ (3) Lock nut
◇ (4) Vacuum detecting port
◇ (5) Vacuum port
◇ (6) Vacuum filter
◇ (7) Air supply port
◇ (8) Exhaust port



AZR Series

Mini Vacuum Generator

How to order

AZR 07 H - J - V - F

① ② ③ ④ ⑤ ⑥

① Series	② Nozzle Diameter	③ Specification	④ Exhaust way	⑤ Special specification	⑥ Vacuum filter
AZR	05 - ϕ0.5mm	H - High vacuum level type	Nil - Direct exhaust	Nil - Standard type	Nil - Standard type
	07 - ϕ0.7mm	L - Large vacuum flow type	J - Centralized exhaust	V - Vacuum detecting port	F - With vacuum filter

Selection

Model/ Nozzle Diameter	05		07	
AZR□□	AZR05H	AZR05L	AZR07H	AZR07L
AZR□□-J	AZR05H-J	AZR05L-J	AZR07H-J	AZR07L-J
AZR□□-J-F	AZR05H-J-F	AZR05L-J-F	AZR07H-J-F	AZR07L-J-F
AZR□□-J-V	AZR05H-J-V	AZR05L-J-V	AZR07H-J-V	AZR07L-J-V
AZR□□-J-V-F	AZR05H-J-V-F	AZR05L-J-V-F	AZR07H-J-V-F	AZR07L-J-V-F
AZR□□-V	AZR05H-V	AZR05L-V	AZR07H-V	AZR07L-V
AZR□□-V-F	AZR05H-V-F	AZR05L-V-F	AZR07H-V-F	AZR07L-V-F
AZR□□-F	AZR05H-F	AZR05L-F	AZR07H-F	AZR07L-F

Technical parameters

Model	Rated air supply pressure bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Max. break flow rate NL/min	Air consumption NL/min	Noise level dB(A)	Weight g	Air supply port P	Recommended hose dia. mm Vacuum port V
AZR05H	5.0	88	7.0	40	11	80	19	ϕ4	ϕ4
AZR07H	5.0	88	12.5	40	22	80	20	ϕ6	ϕ6
AZR05L	5.0	58	12.0	40	11	70	19	ϕ4	ϕ4
AZR07L	5.0	58	20.0	40	22	70	20	ϕ6	ϕ6

◇ Note: Max. air supply pressure is 6.0 bar.

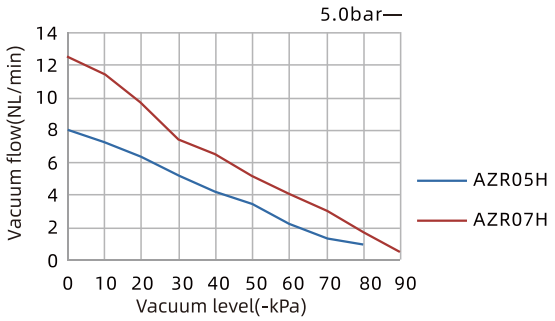
Vacuum flow(NL/min) at different vacuum levels(-kPa)

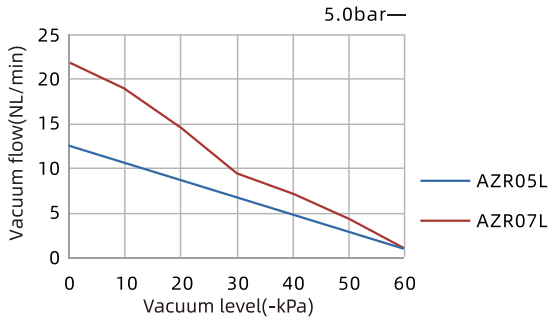
Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	Max. vacuum level -kPa
AZR05H	5.0	11	8.0	7.3	6.3	5.2	4.2	3.4	2.2	1.4	1.0	88
AZR07H	5.0	22	12.5	11.5	9.7	7.4	6.5	5.2	4.1	3.0	1.7	88
AZR05L	5.0	11	12.5	10.5	8.7	6.9	5.0	2.9	1.0	-	-	58
AZR07L	5.0	22	22.0	19.1	14.5	9.4	7.2	4.3	1.0	-	-	58

AZR Series

Mini Vacuum Generator

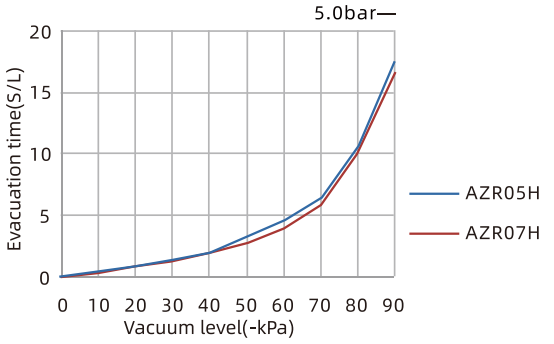
Vacuum flow(NL/min) at different vacuum levels(-kPa)

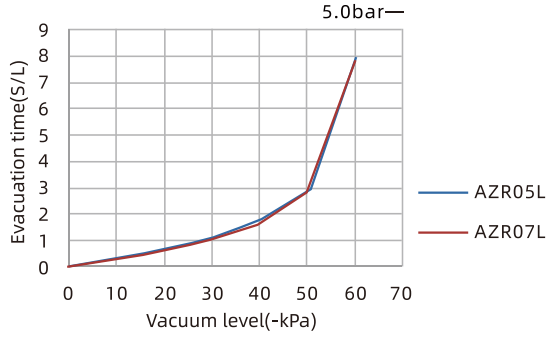




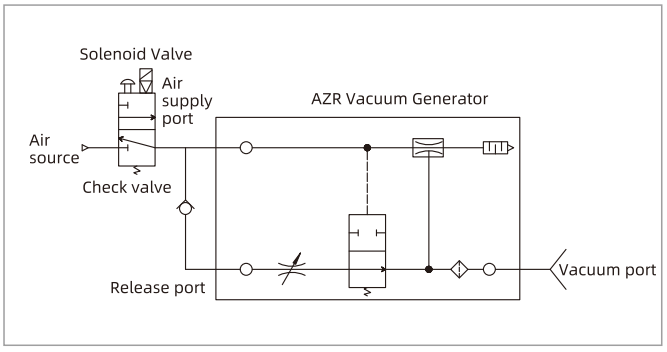
Evacuation time(s/L) to reach different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	Max. vacuum level -kPa
AZR05H	5.0	11	0.42	0.83	1.30	1.92	3.2	4.5	6.3	10.5	88
AZR07H	5.0	22	0.34	0.75	1.22	1.87	2.7	3.8	5.7	9.9	88
AZR05L	5.0	11	0.32	0.64	1.06	1.73	2.9	8.2	-	-	58
AZR07L	5.0	22	0.23	0.53	0.93	1.53	2.8	7.8	-	-	58





Air circuit schematic diagram



Vacuum release principle and attentions:

◇ 1. Close solenoid valve and stop air supply, open the release valve. The residual positive pressure air in the air circuit between check valve and release port flows into the vacuum circuit to release vacuum

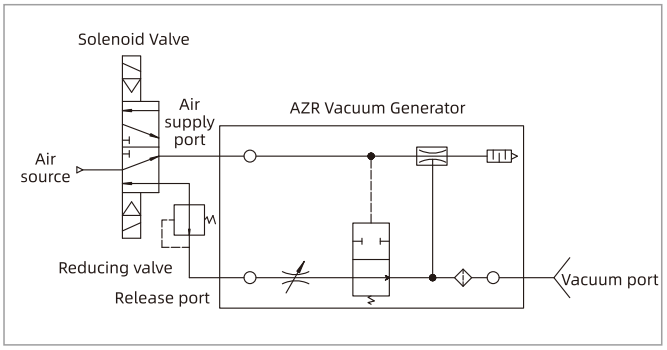
◇ 2. Change the tube length between the check valve and release port to adjust the residual positive pressure air volume. In this way, the vacuum releasing time can be adjusted

◇ 3. The vacuum releasing flow of this way is small

AZR Series

Mini Vacuum Generator

Air circuit schematic diagram



Vacuum release principle and attentions:

◇ 1. Close solenoid valve and stop air supply, open the release valve, and the positive pressure air flows directly into the vacuum circuit to release the vacuum

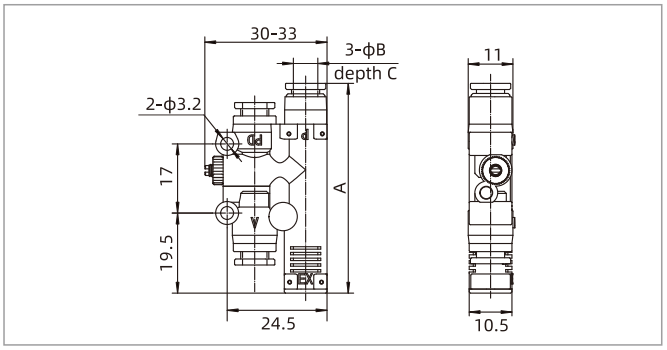
◇ 2. Can adjust the vacuum releasing time through controlling the air supply time of solenoid valve

◇ 3. Adjust the air releasing pressure through the reducing valve to avoid excessive pressure blowing away the workpiece

◇ 4. The air releasing pressure must be lower than air supply pressure of vacuum generator

◇ 5. The releasing flow and pressure can be adjusted freely as required

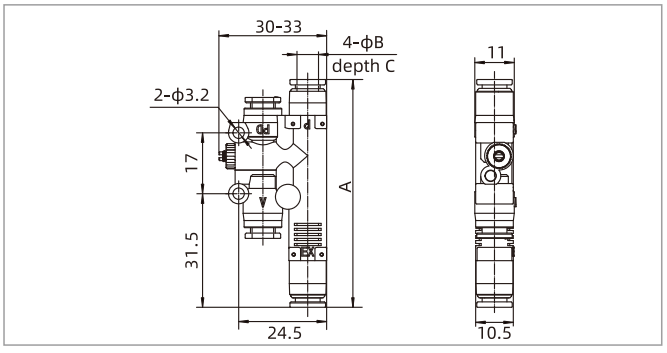
Dimensions(mm)



AZR□□

Model/Size	A	B	C
AZR05H	49.5	4	10
AZR05L	49.5	4	10
AZR07H	51.5	6	12.5
AZR07L	51.5	6	12.5

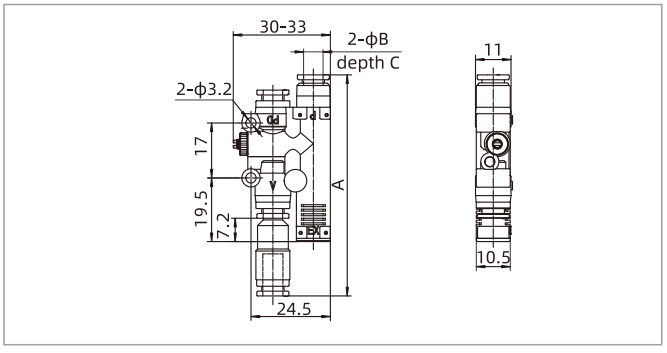
◇ Note:"C" is insert depth



AZR□□-J

Model/Size	A	B	C
AZR05H-J	61.5	4	10
AZR05L-J	61.5	4	10
AZR07H-J	63.5	6	12.5
AZR07L-J	63.5	6	12.5

◇ Note:"C" is insert depth



AZR□□-F

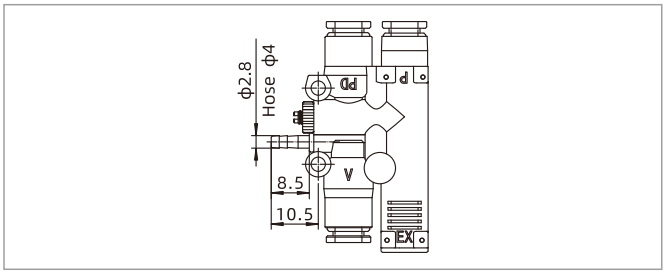
Model/Size	A	B	C
AZR05H-F	65.5	4	10
AZR05L-F	65.5	4	10
AZR07H-F	68.8	6	12.5
AZR07L-F	68.8	6	12.5

◇ Note:"C" is insert depth

AZR Series

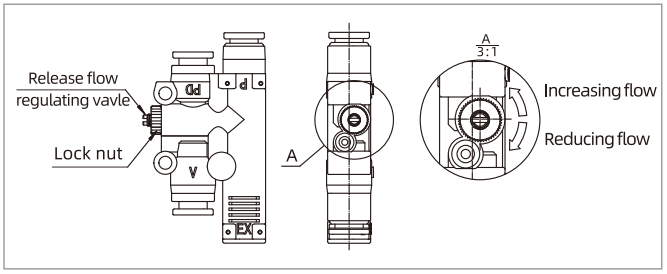
Mini Vacuum Generator

Dimensions(mm)



AZR□□-V

Vacuum release function



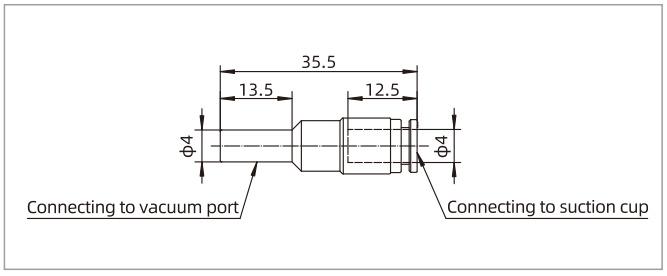
Vacuum releasing flow regulation:

◇1. Rotating clockwise the releasing flow regulating valve to reduce the releasing flow. Rotating counterclockwise the releasing flow regulating valve to increase the releasing flow

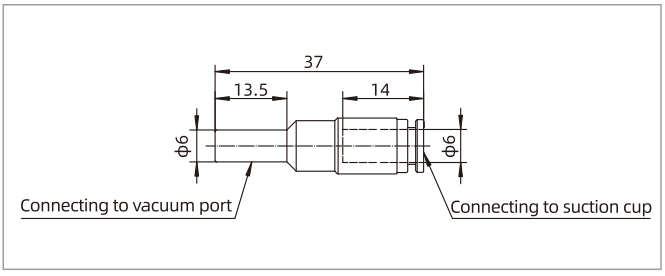
◇2. When regulation is finished, tighten the lock nut clockwise to fix the position of the regulating valve

◇3. The regulating valve has limited positions. When it can not be turned clockwise or counterclockwise, it means that the limit position has been reached

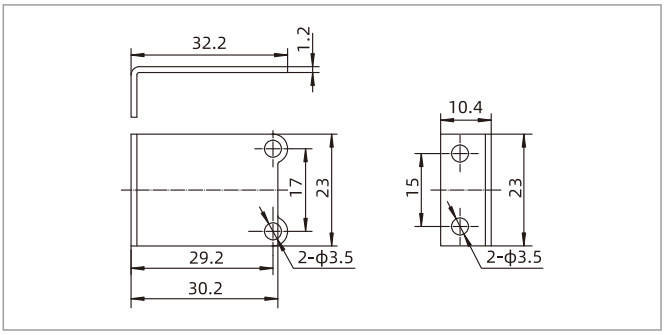
Repair kits dimensions(mm)



ZFD04 Vacuum filter



ZFD06 Vacuum filter



AZR-B Mounting bracket

Item	Model	Applicable vacuum generator
Vacuum filter	ZFD04	AZR05H、AZR05L
Vacuum filter	ZFD06	AZR07H、AZR07L
Mounting bracket	AZR-B	AZR05H、AZR05L、AZR07H、AZR07L

ABT Series

Mini Vacuum Generator

UNIVERSAL

Features

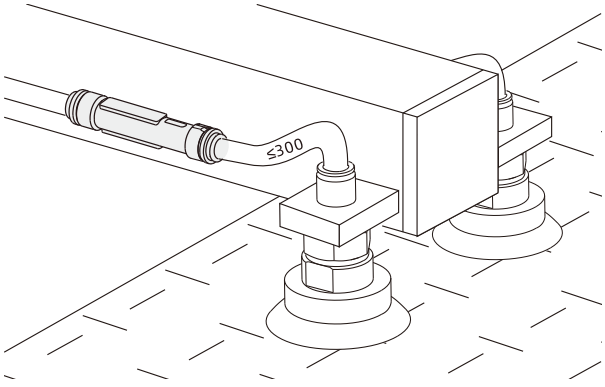
◇ Linear installation
◇ Long and thin plastic housing, compact size
◇ Quick plug connector for direct connection
◇ Optimal lateral direct exhaust design

Advantages

◇ Can be connected to the hose directly
◇ Suitable for installation in narrow spaces
◇ Convenient connection, no additional installation accessories are required
◇ Minimize product noise

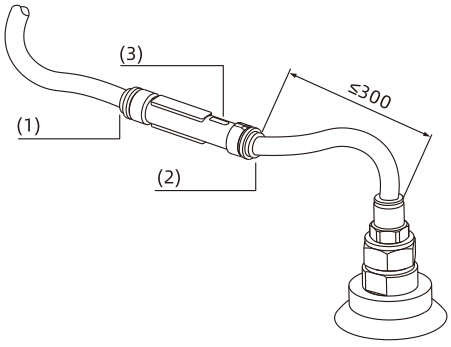
Applications

◇ The linear vacuum generator can be connected to the PU hose directly
◇ Suitable for the handling systems with limited space



Structure

◇ (1) Air supply port
◇ (2) Vacuum port
◇ (3) Exhaust port



ABT Series

Mini Vacuum Generator

How to order

ABT - T05

① ②

① Series	② Specification
ABT	S02 X10 T05 P12 X2.5 D16 S08

Technical parameters

Model	Air supply pressure range bar	Rated air supply pressure bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Air consumption NL/min	Noise level dB(A)	Working temperature ℃	Weight g	Recommended hose dia.(mm)	
									Air supply port	Vacuum port
ABT-S02	4.0~7.0	6.0	75	16.8	8	70	0~60	15	ϕ6	ϕ6
ABT-T05	4.0~7.0	5.0	81	18	18.5	70	0~60	15	ϕ6	ϕ6
ABT-X2.5	4.0~7.0	5.0	90	15.6	9.5	70	0~60	15	ϕ6	ϕ6
ABT-S08	4.0~7.0	6.0	75	46	27	73	0~60	29	ϕ8	ϕ8
ABT-X10	4.0~7.0	5.0	92	42	30	73	0~60	29	ϕ8	ϕ8
ABT-P12	2.0~7.0	3.14	90	42	29	73	0~60	29	ϕ8	ϕ8
ABT-D16	4.0~7.0	6.0	72	40	46	77	0~60	29	ϕ8	ϕ8

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
ABT-S02	6.0	8	16.8	12.2	6.3	4.6	3.9	3.0	2.0	-	-	75
ABT-T05	5.0	18.5	18	16.2	13.3	9.9	8.2	5.6	4.2	3.1	1.3	81
ABT-X2.5	5.0	9.5	15.6	11.6	6.6	4	3.3	2.6	1.7	-	-	90
ABT-S08	6.0	27	46	42	32.6	22.6	12	9.8	8.3	5.9	-	75
ABT-X10	5.0	30	42	40	30.6	22.2	13.5	8.9	6.6	4.5	2	92
ABT-P12	3.14	29	42	36	25.6	14.9	10.4	8.9	6.6	4.2	1.9	90
ABT-D16	6.0	46	40	38	30.5	26.7	22	17	12	3.5	-	72

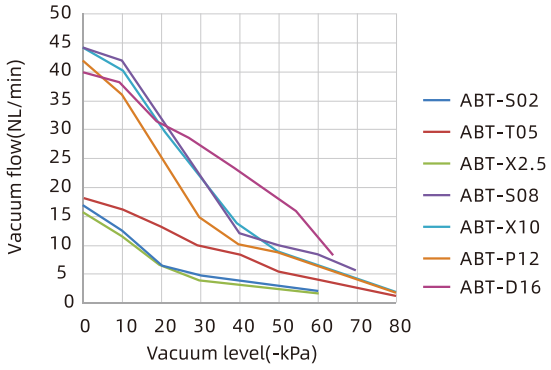
Evacuation time(s/L) to reach different vacuum levels(-kPa)

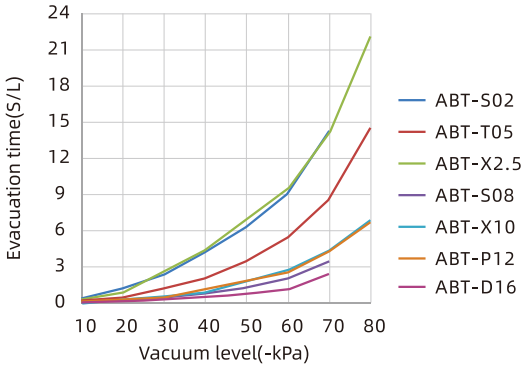
Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	Max. vacuum level -kPa
ABT-S02	6.0	8	0.3	1.1	2.4	4.1	6.2	9	14.3	-	75
ABT-T05	5.0	18.5	0.18	0.52	1.11	1.98	3.35	5.45	8.5	14.6	81
ABT-X2.5	5.0	9.5	0.3	0.9	2.4	4.3	6.7	9.5	14.1	22.03	90
ABT-S08	6.0	27	0.07	0.2	0.39	0.74	1.35	2.14	3.35	-	75
ABT-X10	5.0	30	0.05	0.23	0.48	0.95	1.68	2.71	4.18	6.86	92
ABT-P12	3.14	29	0.12	0.29	0.59	1.07	1.86	2.66	4.33	6.72	90
ABT-D16	6.0	46	0.04	0.18	0.39	0.63	0.95	1.47	3.1	-	72

ABT Series

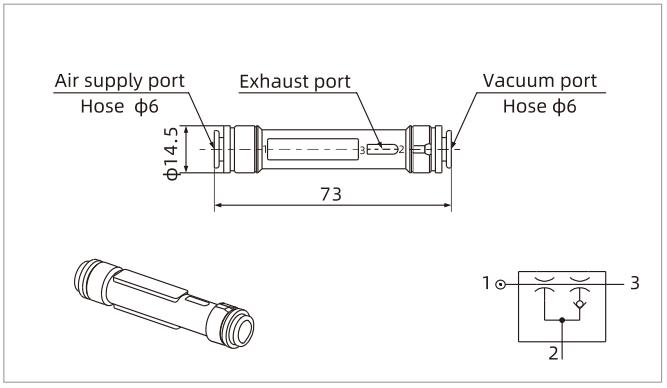
Mini Vacuum Generator

Technical parameters

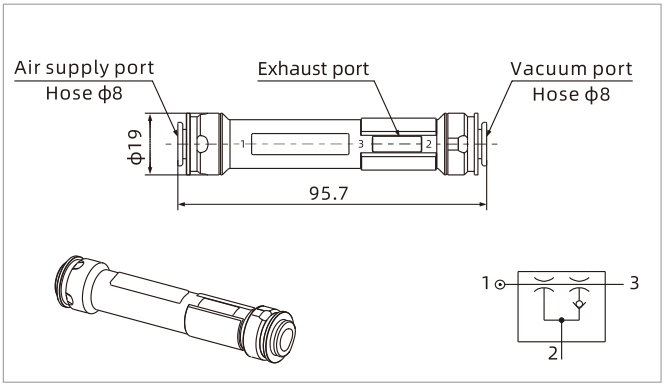




Dimensions(mm)



ABT-S02/T05/X2.5



ABT-S08/X10/P12/D16

ABP Series

Vacuum Generator with Fast Blow-off

UNIVERSAL

Features

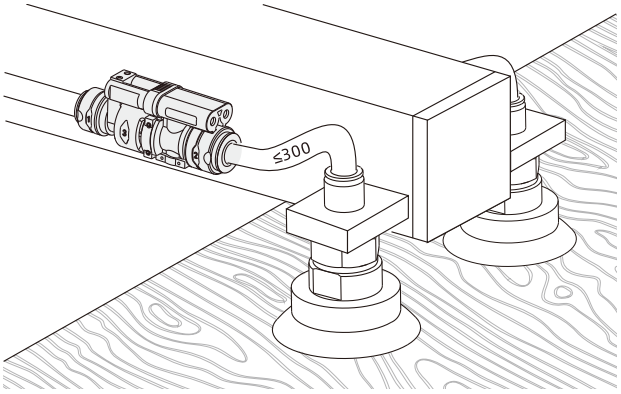
◇ Axial connection
◇ Plastic housing, compact size, light weight
◇ Connect plug-in fitting directly
◇ Optimal direct lateral exhaust design
◇ Built-in fast breaking device, no need of external drive

Advantages

◇ Connect hose directly
◇ Suitable for installing in narrow space
◇ Easy to mount, there is no need to add extra mounting accessories
◇ Reduce product noise most
◇ Release product fast

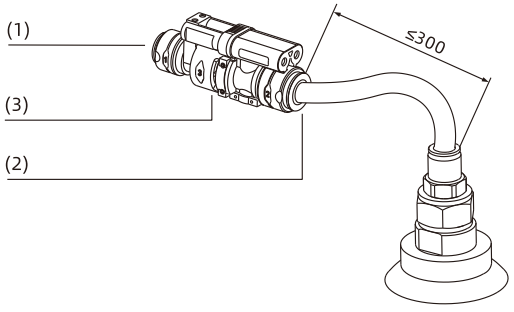
Applications

◇ The linear vacuum generator can be connected with the PU hose directly
◇ Suitable for the handling systems with limited space
◇ Suitable for occasions where there is no need of external drive and can automatically release workpiece fast
◇ Suitable for occasions where need to grip and release workpieces fastly, and there is requirement for light weight of whole equipment, etc.



Structure

◇ (1) Air supply port
◇ (2) Vacuum port
◇ (3) Exhaust port



ABP Series

Vacuum Generator with Fast Blow-off

How to order

ABP - 10

① ②

□ Series	□ Specification
ABP	10

Technical parameters

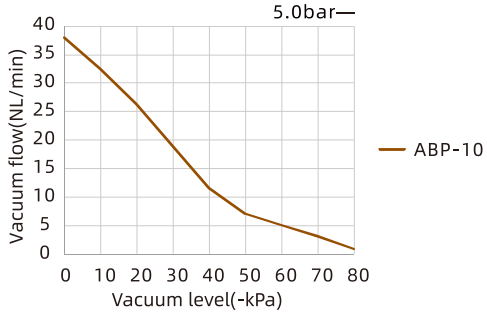
Model	Air supply pressure range bar	Rated air supply pressure bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Air consumption NL/min	Noise level dB(A)	Working temperature ℃	Weight g	Recommended hose dia.(mm) Air supply port P	Vacuum port V
ABP-10	4.0~7.0	5.0	81	38	38	70	0~60	34	ϕ8	ϕ10

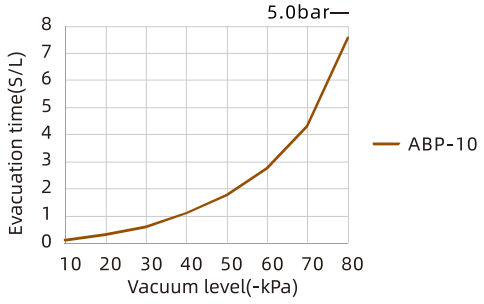
Vacuum flow(NL/min) at different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	Max. vacuum level -kPa
ABP-10	5.0	38	38.0	32.4	26.3	18.9	11.5	7.1	5.0	3.2	0.8	81

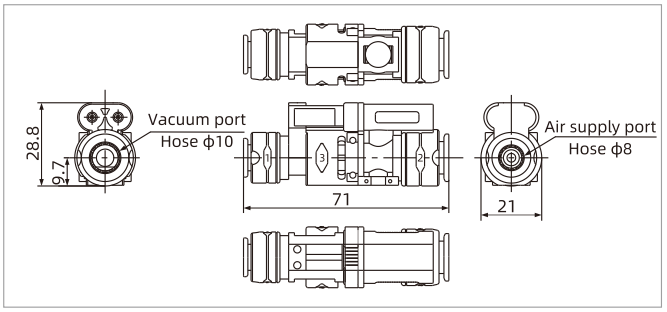
Evacuation time(s/L) to reach different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	Max. vacuum level -kPa
ABP-10	5.0	38	0.12	0.32	0.61	1.08	1.76	2.73	4.29	7.58	81



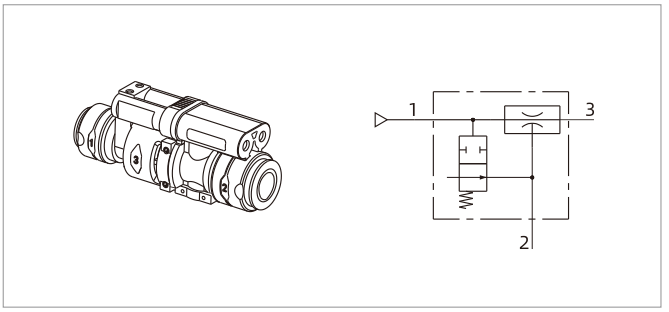


Dimensions(mm)



ABP-10

ABP-10 Air circuit schematic diagram



ABP-10 Note: 1. Air supply port, 2. Vacuum port, 3. Exhaust port

ABQ Series

Vacuum Generator with Fast Blow-off

UNIVERSAL

Features

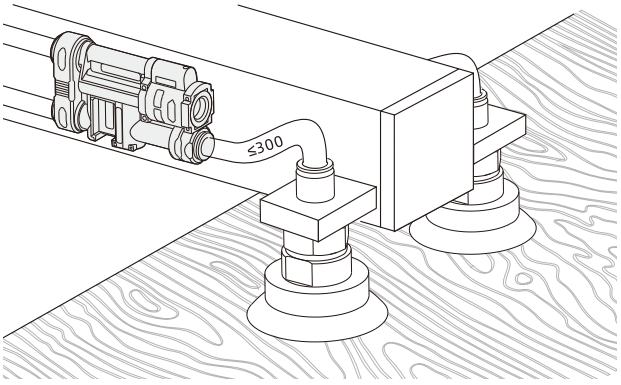
◇ Plastic housing,compact size and light weight
◇ Connect plug-in fitting directly
◇ Optimal direct lateral exhaust design
◇ Built-in fast blow-off device

Advantages

◇ Suitable for installing in narrow space
◇ Easy installation, no need extra mounting accessory
◇ Minimize product noise
◇ Safe and reliable with fast blow-off system

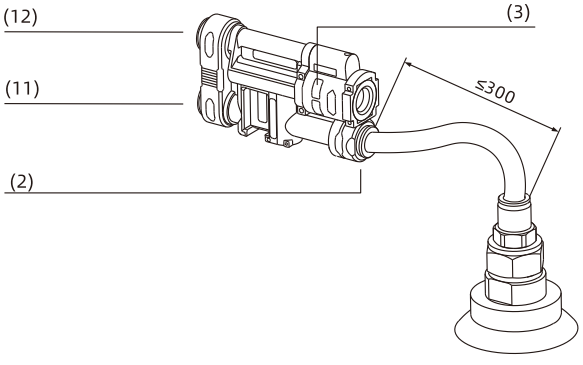
Applications

◇ Suitable for handling system with limited space
◇ Suitable for occasions where require safe and quick release of the workpieces
◇ Suitable for occasions where need to grip and release workpieces fastly, and there is requirement for light weight of whole equipment, etc.



Structure

◇ (11) Air supply port
◇ (12) Vacuum release port
◇ (2) Vacuum port
◇ (3) Exhaust port



ABQ Series

Vacuum Generator with Fast Blow-off

How to order

ABQ - 08

① ②

□ Series	□ Specification
ABQ	08

Technical parameters

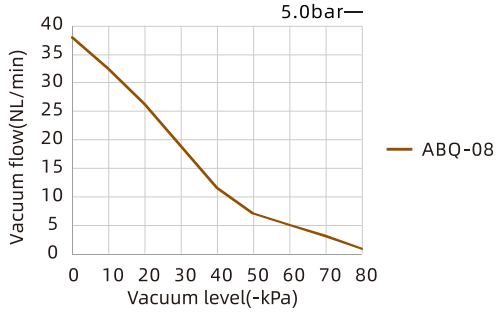
Model	Air supply pressure range bar	Rated air supply pressure bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Air consumption NL/min	Noise level dB(A)	Working temperature ℃	Weight g	Recommended hose dia.(mm) Air supply port	Recommended hose dia.(mm) Vacuum port
ABQ-08	4.0~7.0	5.0	81	38	38	70	0~60	55	ϕ8	ϕ8

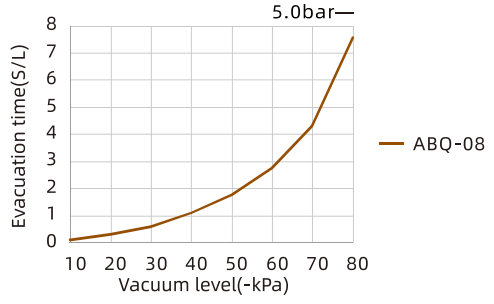
Vacuum flow(NL/min) at different vacuum levels(-kPa)

Model	Air supply pressure range bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	Max. vacuum level -kPa
ABQ-08	5.0	38	38.0	32.4	26.3	18.9	11.5	7.1	5.0	3.2	0.8	81

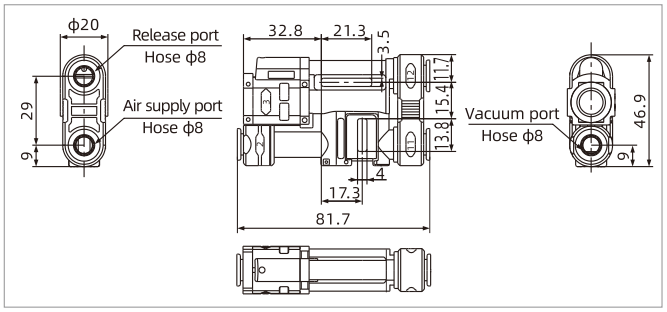
Evacuation time(s/L) to reach different vacuum levels(-kPa)

Model	Air supply pressure range bar	Air consumption NL/min	10	20	30	40	50	60	70	80	Max. vacuum level -kPa
ABQ-08	5.0	38	0.12	0.32	0.61	1.08	1.76	2.73	4.29	7.58	81



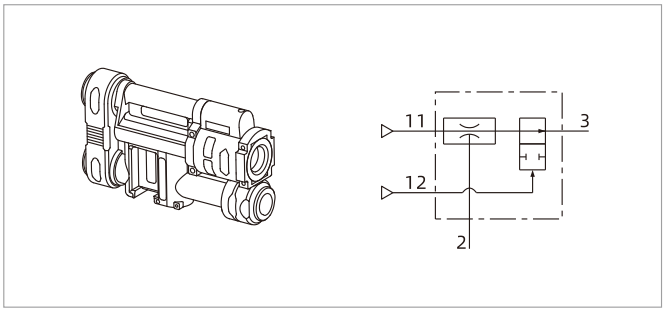


Dimensions(mm)



ABQ-08

ABQ-08 Air circuit schematic diagram



ABQ-08 Note: 11. Air supply port, 12. Release port, 3. Exhaust port, 2:Vacuum port

AZL Series

Multistage Vacuum Generator

METAL SHEET | PACKAGING | PLASTIC

RoHS

Features

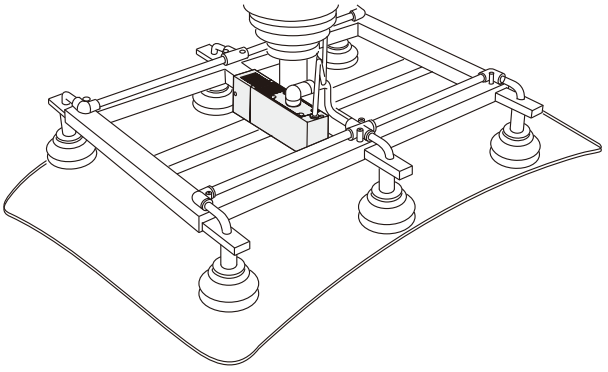
◇ Multi-level and energy-efficient design
◇ Optional solenoid valve and pressure switch
◇ Built-in vacuum filter and silencer
◇ Vertical and lateral mounting holes for option

Advantages

◇ Vacuum flow can be increased, save air consumption and shorten working cycle
◇ Control function is optional, no need of separate external connection to save space and reduce cost
◇ Minimize noise, the filter element is replaceable
◇ A variety of installation ways are available

Applications

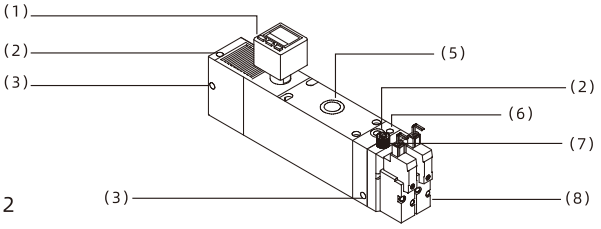
◇ Suitable for handling of cartons,metal sheet and plastics
◇ Suitable for occasions which require large vacuum flow, fast evacuation and low air consumption



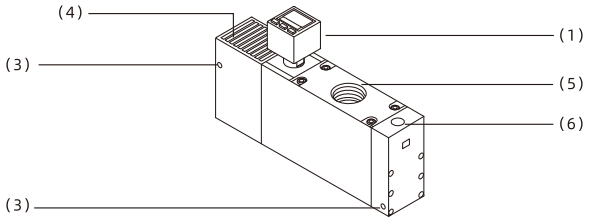
Structure

◇ (1) Pressure switch
◇ (2) Vertical mounting hole
◇ (3) Lateral mounting hole
◇ (4) Exhaust port
◇ (5) Vacuum port
◇ (6) Air supply port
◇ (7) Vacuum release valve
◇ (8) Vacuum supply valve

AZL112



AZL212



AZL Series

Multistage Vacuum Generator

How to order

AZL 112 - A - DCN
① ② ③ ④

① Series	② Nozzle diameter	③ Control valve	④ Digital vacuum pressure switch
AZL	112 - 1×ϕ1.2mm 212 - 2×ϕ1.2mm	Nil - Without vacuum supply valve and vacuum release valve A - With vacuum supply valve and vacuum release valve	Nil - Default,without external vacuum port NP - With vacuum port Rc1/8, without pressure switch DCN - Compound pressure switch (-100.0~100.0kPa), 2NPN+V(1-5V) DCP - Compound pressure switch (-100.0~100.0kPa), 2PNP+V(1-5V)

Selection-AZL112 Series

Model/Control valve Nil- Without control valve	A - With vacuum supply valve +vacuum release valve
AZL112	AZL112-A
AZL112-NP	AZL112-A-NP
AZL112-DCN	AZL112-A-DCN
AZL112-DCP	AZL112-A-DCP

Selection-AZL212 Series

Model/Control valve Nil- Without control valve	A - With vacuum supply valve +vacuum release valve
AZL212	-
AZL212-NP	-
AZL212-DCN	-
AZL212-DCP	-

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 ℃	Recommended hose dia.(mm) Air supply port (P)	Vacuum port (V)
AZL112	4.0	84	100	63	70	5~50	ϕ6	ϕ12
AZL212	4.0	84	200	126	77	5~50	ϕ8	ϕ12

◇ Note: Max.operating pressure 7bar, recommended air supply pressure range 2-5bar. Noise level is measured by the vacuum generator with built-in silencer.

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

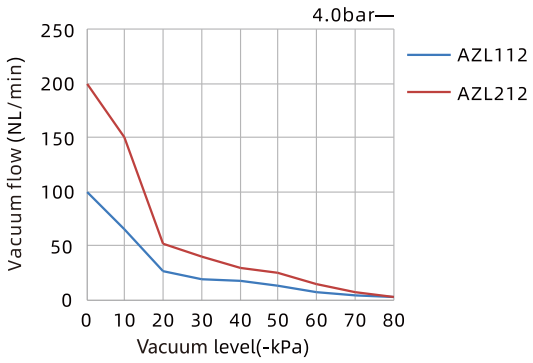
Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	Max. vacuum level -kPa
AZL112	4.0	63	100.0	65.0	26.0	20.0	18.5	13.0	8.0	5.0	2.8	84
AZL212	4.0	126	200.0	150.0	52.0	40.0	30.0	25.0	15.0	8.0	3.0	84

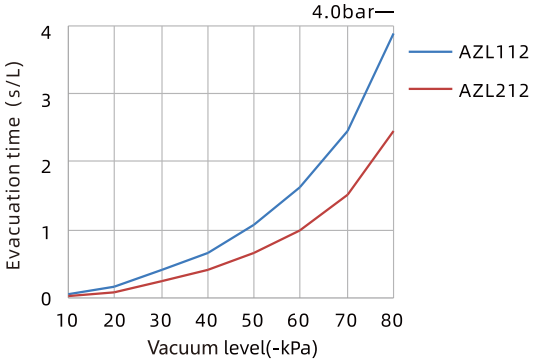
Evacuation time(s/L) to reach different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	Max. vacuum level -kPa
AZL112	4.0	63	0.05	0.17	0.40	0.67	1.07	1.63	2.46	3.9	84
AZL212	4.0	126	0.02	0.08	0.25	0.42	0.65	0.98	1.52	2.46	84

AZL Series

Multistage Vacuum Generator



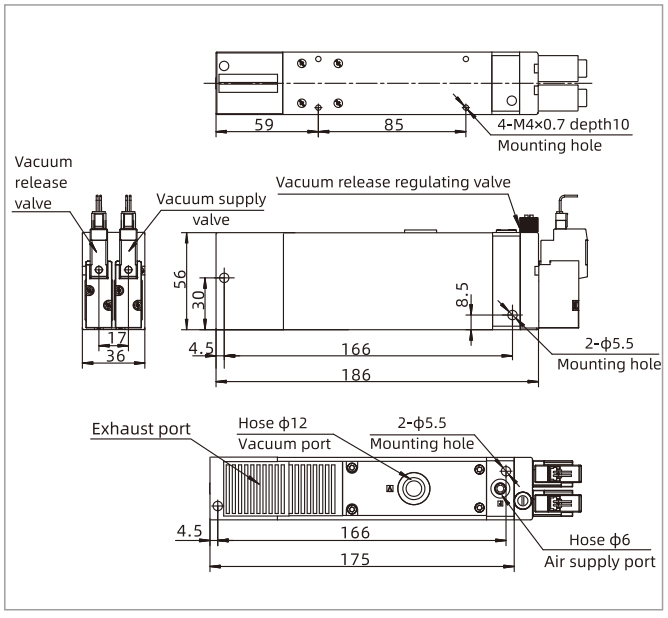


Technical parameters- Control valve

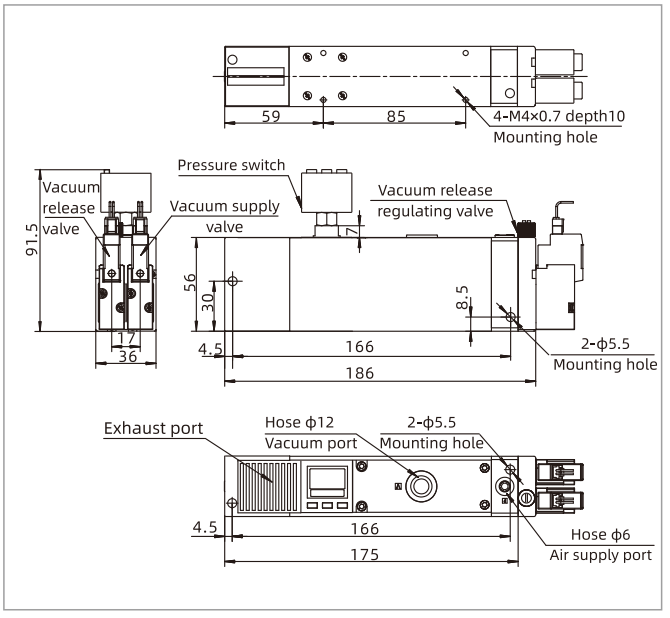
Type of valve actuation	Internal pilot type NC (normally closed)
Operating pressure range	2.0~5.0bar
Rated voltage	24V
Ambient and fluid temperature	5~50℃
Response time(at 0.5Mpa)	25ms below
Max. operating frequency	5Hz
Manual operation	Slotted locking type

Pilot exhaust type	Individual exhaust,concentrated exhaust
Lubrication	Not required
Mounting position	Unrestricted
Impact/Vibration resistance	150/30m/s²
Enclosure	Dust-proof
Lead wire type	Direct lead out type, lead wire length 0.3m

Dimensions(mm)

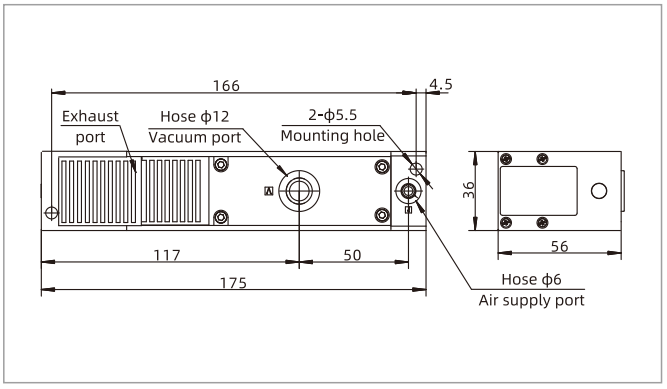


AZL112-A

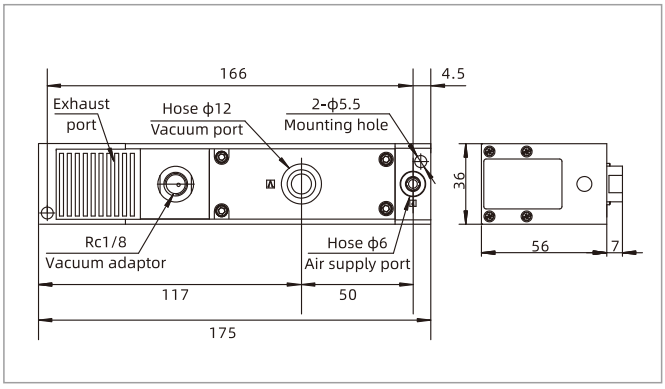


AZL112-A-DCN AZL112-A-DCP

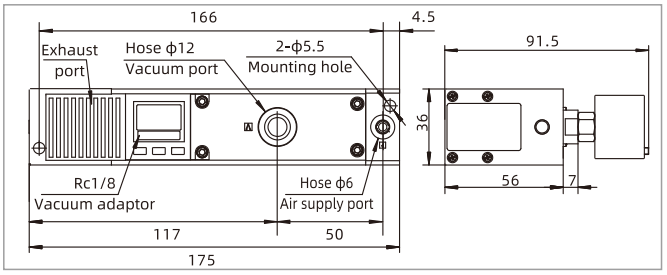
Dimensions(mm)



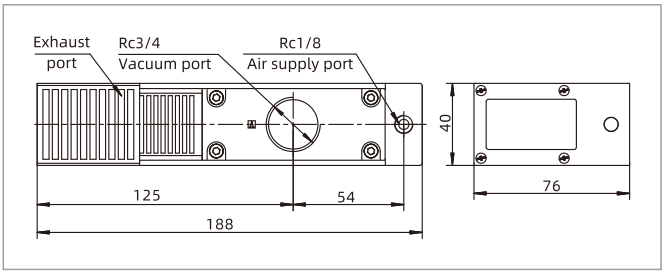
AZL112



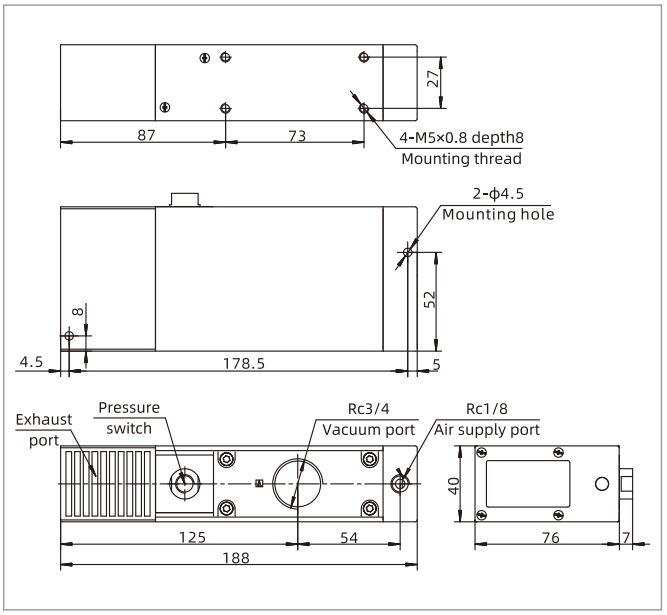
AZL112-NP



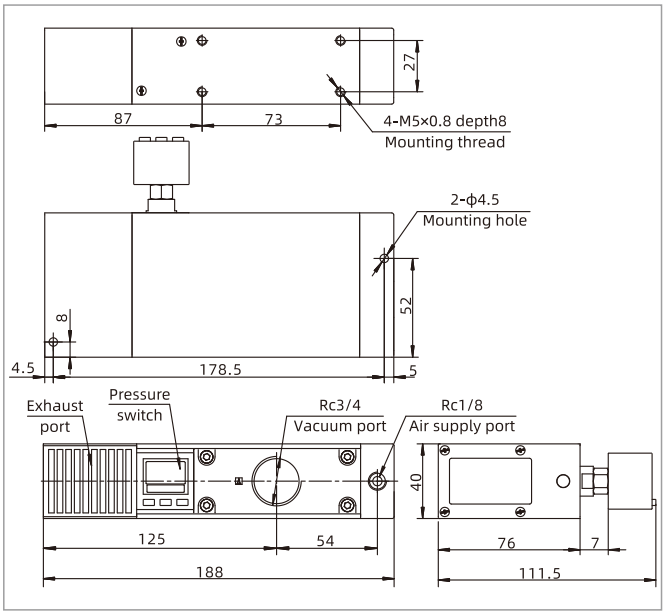
AZL112-DCN AZL112-DCP



AZL212



AZL212-NP



AZL212-DCN AZL212-DCP

AZH Series

Basic Vacuum Generator

UNIVERSAL

RoHS

Features

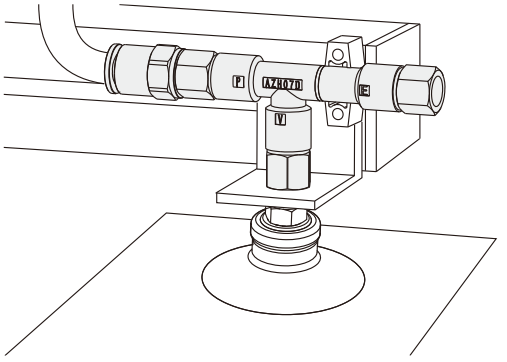
◇ Single stage vacuum generator with plastic housing
◇ High vacuum level type and large vacuum flow type for option
◇ Body ported type and box type for option
◇ Thread connection or one-touch fitting for port connection

Advantages

◇ Small size,light weight and cost-effective
◇ Suitable for various occasions
◇ Box type with built-in silencer to reduce noise
◇ Thread connection and one-touch fitting for option

Applications

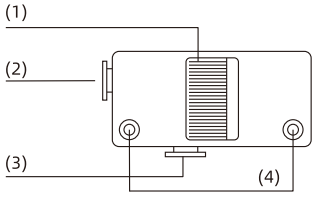
◇ Widely used in all kinds of vacuum systems
◇ Suitable for various handling operations such as automotive, metal sheet, wood, food and packaging, etc.
◇ High vacuum type and large flow type for different occasions



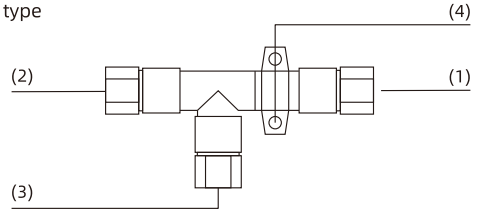
Structure

◇ (1) Exhaust port
◇ (2) Air supply port
◇ (3) Vacuum port
◇ (4) Mounting hole

B - Box type



D - Body ported type



AZH Series

Basic Vacuum Generator

How to order

AZH 07 B S - 06 - 06

AZH 07 D S - 01 - 01 - 01

① ② ③ ④ ⑤ ⑥ ⑦

① Series	② Nozzle diameter	③ Shape	④ Specification	⑤ Air supply port	⑥ Vacuum port	⑦ Exhaust port
AZH	05 - ϕ0.5mm	B - Box type	S - High vacuum level type (-88kPa)	06 - ϕ6 One-touch fitting	06 - ϕ6 One-touch fitting	06 - ϕ6 One-touch fitting
	07 - ϕ0.7mm	D - Body ported type		08 - ϕ8 One-touch fitting	10 - ϕ10 One-touch fitting	08 - ϕ8 One-touch fitting
	10 - ϕ1.0mm			10 - ϕ10 One-touch fitting	12 - ϕ12 One-touch fitting	10 - ϕ10 One-touch fitting
	13 - ϕ1.3mm		L - Large vacuum flow type (-48kPa)	12 - ϕ12 One-touch fitting	16 - ϕ16 One-touch fitting	12 - ϕ12 One-touch fitting
	15 - ϕ1.5mm			01 - Rc1/8 Female thread	01 - Rc1/8 Female thread	16 - ϕ16 One-touch fitting
	18 - ϕ1.8mm			02 - Rc1/4 Female thread	02 - Rc1/4 Female thread	01 - Rc1/8 Female thread
	20 - ϕ2.0mm			03 - Rc3/8 Female thread	03 - Rc3/8 Female thread	02 - Rc1/4 Female thread
					04 - Rc1/2 Female thread	03 - Rc3/8 Female thread
						04 - Rc1/2 Female thread

Selection-Box type

Model/Shape BS		BL	
AZH05BS-06-06	AZH05BS-01-01	AZH05BL-06-06	AZH05BL-01-01
AZH07BS-06-06	AZH07BS-01-01	AZH07BL-06-06	AZH07BL-01-01
AZH10BS-06-06	AZH10BS-01-01	AZH10BL-06-06	AZH10BL-01-01
AZH13BS-08-10	AZH13BS-01-02	AZH13BL-08-10	AZH13BL-01-02

Selection-Body ported type

Model/Shape DS		DL	
AZH05DS-06-06-06	AZH05DS-01-01-01	AZH05DL-06-06-06	AZH05DL-01-01-01
AZH07DS-06-06-06	AZH07DS-01-01-01	AZH07DL-06-06-06	AZH07DL-01-01-01
AZH10DS-06-06-08	AZH10DS-01-01-01	AZH10DL-06-06-08	AZH10DL-01-01-01
AZH13DS-08-10-10	AZH13DS-01-02-02	AZH13DL-08-10-10	AZH13DL-01-02-02
AZH15DS-10-12-12	AZH15DS-02-03-03	AZH15DL-10-12-12	AZH15DL-02-03-03
AZH18DS-12-12-12	AZH18DS-03-03-03	AZH18DL-12-12-12	AZH18DL-03-03-03
AZH20DS-12-16-16	AZH20DS-03-04-04	AZH20DL-12-16-16	AZH20DL-03-04-04

Technical parameters

Model	Rated air supply pressure bar	Max. vacuum level -kPa S	Max. vacuum level -kPa L	Max. vacuum flow NL/min S	Max. vacuum flow NL/min L	Air consumption NL/min	Noise level dB(A)	Working temperature ℃	Weight g	Recommended hose dia.(mm) Air supply port S	Vacuum port V	Exhaust port E
AZH05B	4.5	88	48	5	9	13.5	68	5~50	28	ϕ6	ϕ6	-
AZH07B	4.5	88	48	12	22	23.5	68	5~50	28	ϕ6	ϕ6	-
AZH10B	4.5	88	48	24	34	46.0	72	5~50	33	ϕ6	ϕ6	-
AZH13B	4.5	88	48	40	75	78.0	72	5~50	66	ϕ8	ϕ10	-

AZH Series

Basic Vacuum Generator

Technical parameters

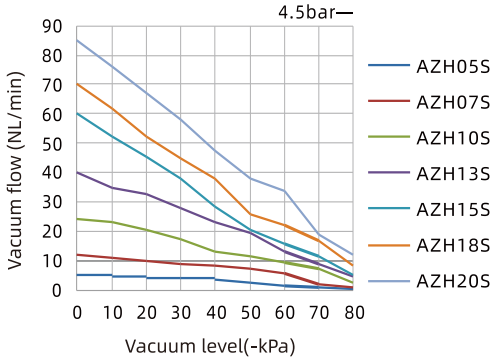
Model	Rated air supply pressure bar	Max. vacuum level -kPa S	Max. vacuum level -kPa L	Max. vacuum flow NL/min S	Max. vacuum flow NL/min L	Air consumption NL/min	Noise level dB(A)	Working temperature ℃	Weight g	Recommended hose dia.(mm) Air supply port S	Vacuum port V	Exhaust port E
AZH05D	4.5	88	48	7.5	9	13.5	75	5~50	11	ϕ6	ϕ6	ϕ6
AZH07D	4.5	88	48	12	22	23.5	75	5~50	12	ϕ6	ϕ6	ϕ6
AZH10D	4.5	88	48	24	34	46.0	68	5~50	16	ϕ6	ϕ6	ϕ8
AZH13D	4.5	88	48	40	75	78.0	68	5~50	27	ϕ8	ϕ10	ϕ10
AZH15D	4.5	88	53	60	80	97.0	72	5~50	43	ϕ10	ϕ12	ϕ12
AZH18D	4.5	88	53	70	110	150.0	72	5~50	55	ϕ12	ϕ12	ϕ12
AZH20D	4.5	88	53	85	140	185.0	75	5~50	95	ϕ12	ϕ16	ϕ16

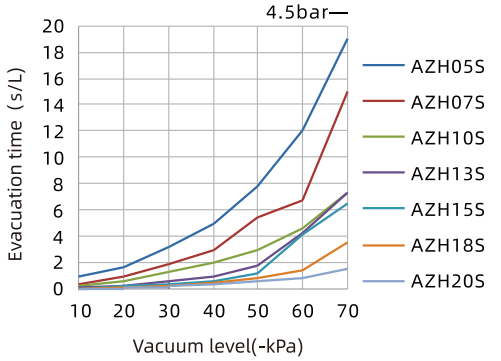
Vacuum flow(NL/min) at different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	Max. vacuum level -kPa
AZH05S	4.5	13.5	5.0	4.5	4.1	3.8	3.3	2.3	1.6	0.9	0.3	88
AZH07S	4.5	23.5	12.0	11.0	10.0	9.0	8.0	7.0	5.5	2.1	0.8	88
AZH10S	4.5	46.0	24.0	23.0	20.5	17.5	13.0	11.5	9.5	7.0	2.5	88
AZH13S	4.5	78.0	40.0	35.0	32.5	28.0	23.0	19.5	13.0	9.0	4.5	88
AZH15S	4.5	97.0	60.0	52.5	45.5	38.0	28.5	20.5	15.5	11.5	5.0	88
AZH18S	4.5	150.0	70.0	62.0	52.0	45.0	38.0	26.0	22.0	16.5	8.5	88
AZH20S	4.5	185.0	85.0	76.0	67.0	58.0	47.5	38.0	33.5	19.0	12.0	88

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
AZH05S	4.5	13.5	0.89	1.70	3.20	5.00	7.80	12.00	19.00	88
AZH07S	4.5	23.5	0.37	1.00	1.90	3.00	5.40	6.70	15.00	88
AZH10S	4.5	46.0	0.25	0.60	1.25	2.00	2.90	4.60	7.30	88
AZH13S	4.5	78.0	0.10	0.27	0.53	1.00	1.75	4.20	7.30	88
AZH15S	4.5	97.0	0.04	0.21	0.35	0.63	1.23	4.10	6.50	88
AZH18S	4.5	150.0	0.02	0.15	0.29	0.46	0.78	1.38	3.51	88
AZH20S	4.5	185.0	0.02	0.12	0.21	0.34	0.55	0.85	1.58	88





AZH Series

Basic Vacuum Generator

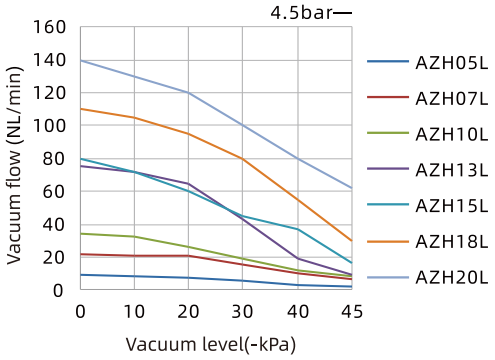
Vacuum flow(NL/min) at different vacuum levels(-kPa)

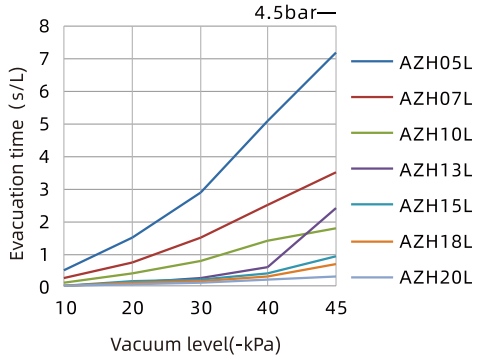
Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	45	Max. vacuum level -kPa
AZH05L	4.5	13.5	9.0	8.0	7.0	6.0	3.0	1.9	48
AZH07L	4.5	23.5	22.0	21.0	20.5	15.5	10.5	6.8	48
AZH10L	4.5	46.0	34.0	32.0	26.0	19.0	12.0	8.0	48
AZH13L	4.5	78.0	75.0	72.0	65.0	43.0	19.0	9.0	48
AZH15L	4.5	97.0	80.0	72.0	60.0	45.0	36.5	16.0	53
AZH18L	4.5	150.0	110.0	105.0	95.0	80.0	55.0	30.0	53
AZH20L	4.5	185.0	140.0	130.0	120.0	100.0	80.0	62.0	53

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

Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	45	Max. vacuum level -kPa
AZH05L	4.5	13.5	0.49	1.50	2.90	5.10	7.20	48
AZH07L	4.5	23.5	0.28	0.75	1.50	2.50	3.50	48
AZH10L	4.5	46.0	0.14	0.40	0.81	1.40	1.80	48
AZH13L	4.5	78.0	0.04	0.12	0.24	0.62	2.40	48
AZH15L	4.5	97.0	0.03	0.15	0.23	0.40	0.92	53
AZH18L	4.5	150.0	0.02	0.10	0.18	0.32	0.67	53
AZH20L	4.5	185.0	0.01	0.08	0.14	0.20	0.30	53

Technical parameters

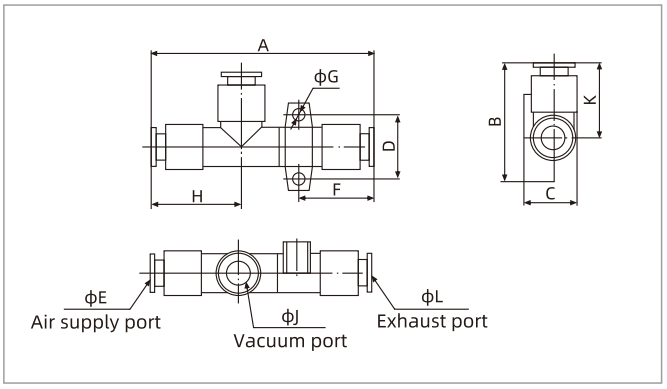




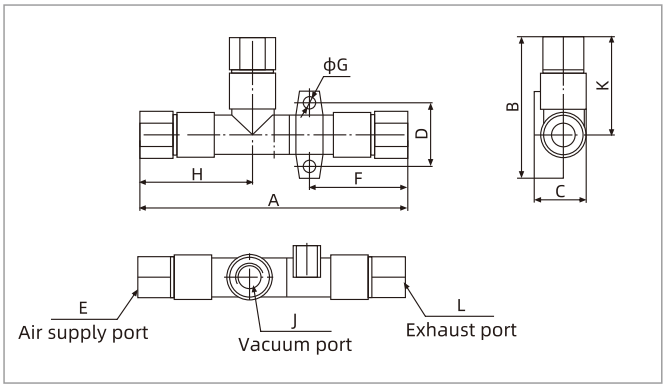
AZH Series

Basic Vacuum Generator

Dimensions(mm)



AZH - D Body ported type(One-touch fitting)



AZH - D Body ported type(Female thread connection)

Model/Size	A	B	C	D	E	F	G	H	L	K	J
AZH05DS-06-06-06	58.5	34.0	14.2	17.0	6	21.0	3.2	24.0	6	22.0	6
AZH07DS-06-06-06	61.0	34.0	14.2	17.0	6	22.0	3.2	24.0	6	22.0	6
AZH10DS-06-06-08	66.0	37.0	17.2	20.0	6	24.5	4.2	26.0	8	23.0	6
AZH10DL-06-06-08	70.0	37.0	17.2	20.0	6	24.5	4.2	26.0	8	23.0	6
AZH13DS-08-10-10	74.0	42.5	20.0	22.0	8	27.0	4.2	28.0	10	27.5	10
AZH13DL-08-10-10	79.5	42.5	20.0	22.0	8	27.0	4.2	28.0	10	27.5	10
AZH15DS-10-12-12	93.3	47.0	22.5	27.0	10	32.8	4.2	31.5	12	29.5	12
AZH18DS-12-12-12	114.0	41.0	21.0	10.0	12	50.0	3.5	35.5	12	30.5	12
AZH20DS-12-16-16	124.6	46.0	27.0	12.0	12	54.3	3.5	38.5	16	32.7	16

AZH - D Body ported type(One-touch fitting)

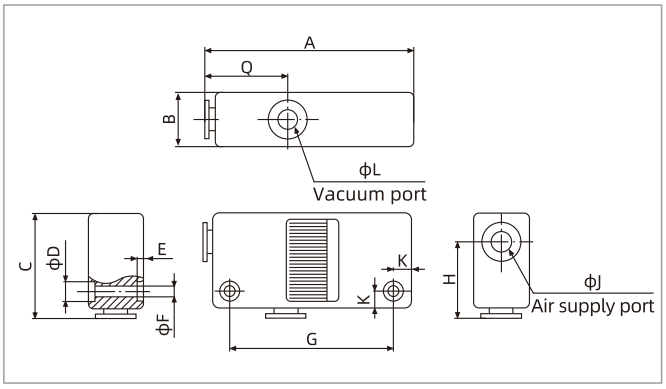
Model/Size	A	B	C	D	E	F	G	H	L	K	J
AZH05DS-01-01-01	73.5	41.5	14.2	17.0	Rc1/8	28.5	3.2	31.5	Rc1/8	29.5	Rc1/8
AZH07DS-01-01-01	76.0	41.5	14.2	17.0	Rc1/8	29.5	3.2	31.5	Rc1/8	29.5	Rc1/8
AZH10DS-01-01-01	82.0	44.5	17.2	20.0	Rc1/8	33.0	4.2	33.5	Rc1/8	30.5	Rc1/8
AZH10DL-01-01-01	86.0	44.5	17.2	20.0	Rc1/8	33.0	4.2	33.5	Rc1/8	30.5	Rc1/8
AZH13DS-01-02-02	94.5	54.0	20.0	22.0	Rc1/8	38.5	4.2	36.5	Rc1/4	39.0	Rc1/4
AZH13DL-01-02-02	99.5	54.0	20.0	22.0	Rc1/8	38.5	4.2	36.5	Rc1/4	39.0	Rc1/4
AZH15DS-02-03-03	116.5	58.5	22.5	27.0	Rc1/4	44.5	4.2	43.0	Rc3/8	41.0	Rc3/8
AZH18DS-03-03-03	133.0	52.5	21.0	10.0	Rc3/8	57.5	3.5	47.0	Rc3/8	42.0	Rc3/8
AZH20DS-03-04-04	151.0	61.0	27.0	12.0	Rc3/8	69.3	3.5	50.0	Rc1/2	47.7	Rc1/2

AZH - D Body ported type(Female thread connection)

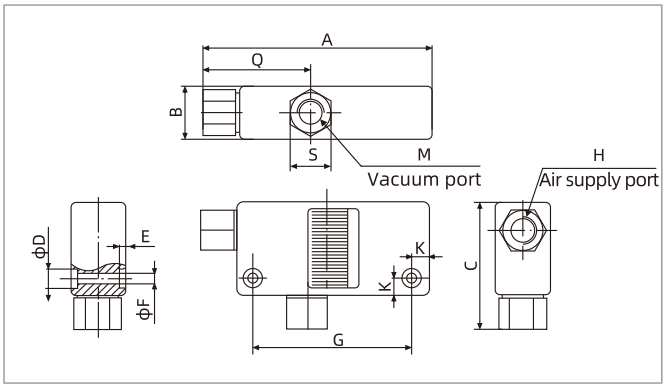
AZH Series

Basic Vacuum Generator

Dimensions(mm)



AZH - B Box type(One-touch fitting)



AZH - B Box type(Female thread connection)

Model/Size	A	B	C	D	E	F	G	H	Q	L	K	J
AZH05B-06-06	60	16	31	5.8	2	3.2	47	22	24	6	5	6
AZH07B-06-06	60	16	31	5.8	2	3.2	47	22	24	6	5	6
AZH10B-06-06	63	18	32	5.8	2	3.2	50	23	26	6	5	6
AZH13B-08-10	78	23	38.5	7.5	3	4.2	61	27.5	28	10	7	8

AZH - B Box type(One-touch fitting)

Model/Size	A	B	C	D	E	F	G	H	Q	M	K	S
AZH05B-01-01	68	16	39	5.8	2	3.2	47	Rc1/8	31.5	Rc1/8	5	12
AZH07B-01-01	68	16	39	5.8	2	3.2	47	Rc1/8	31.5	Rc1/8	5	12
AZH10B-01-01	71	18	40	5.8	2	3.2	50	Rc1/8	33.5	Rc1/8	5	12
AZH13B-01-02	86.5	23	50	7.5	3	4.2	61	Rc1/8	36.5	Rc1/4	7	14

AZH - B Box type(Female thread connection)

AZU Series

Basic Vacuum Generator

ELECTRONICS

RoHS

Features

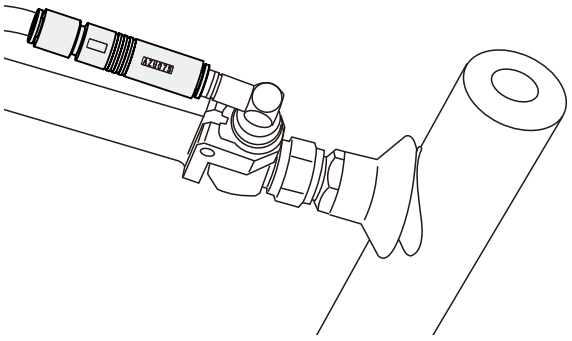
◇ Axial connection
◇ Plastic housing
◇ High vacuum type and large flow type for option

Advantages

◇ Installing directly to hose
◇ Suitable for small space
◇ Easy installation, no additional installation accessories are required

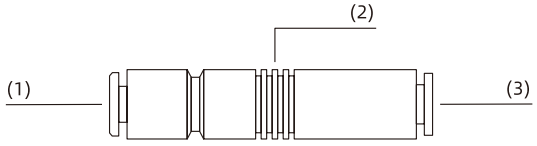
Applications

◇ Linear type to install to PU hose directly
◇ Suitable for handling system of limited space
◇ Handling of electronic components



Structure

◇ (1) Air supply port
◇ (2) Exhaust port
◇ (3) Vacuum port



AZU Series

Basic Vacuum Generator

How to order

AZU 05 S

① ② ③

① Series	② Nozzle diameter	③ Specification
AZU	05 - ϕ0.5mm	S - High vacuum level type（-85kPa）
	07 - ϕ0.7mm	L - Large vacuum flow type（-48kPa）

Selection

Model/Nozzle diameter	05	07
AZU□S	AZU05S	AZU07S
AZU□L	AZU05L	AZU07L

Technical parameters

Model	Nozzle diameter mm	Rated air supply pressure bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Air consumption NL/min	Noise level dB(A)	Working temperature ℃	Weight g	Recommended hose dia.(mm) Air supply port P	Vacuum port V
AZU05S	0.5	4.5	85	7	9	68	5~60	6.5	ϕ6	ϕ6
AZU07S	0.7	4.5	85	12	19	68	5~60	7.0	ϕ6	ϕ6
AZU05L	0.5	4.5	48	12	9	70	5~60	6.5	ϕ6	ϕ6
AZU07L	0.7	4.5	48	21	19	70	5~60	7.0	ϕ6	ϕ6

◇ Note: Max. operating pressure 7bar, standard operating pressure 4.5bar

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

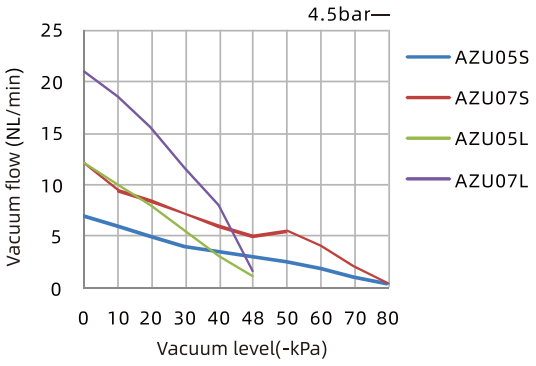
Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	48	50	60	70	80	Max. vacuum level -kPa
AZU05S	4.5	9	7.0	6.0	5.0	4.0	3.5	-	2.5	1.8	1.0	0.4	85
AZU07S	4.5	19	12.0	9.5	8.5	7.2	6.0	-	5.5	4.0	2.0	0.4	85
AZU05L	4.5	9	12.0	10.0	8.0	5.5	3.0	1.0	-	-	-	-	48
AZU07L	4.5	19	21.0	18.5	15.5	11.5	8.0	1.5	-	-	-	-	48

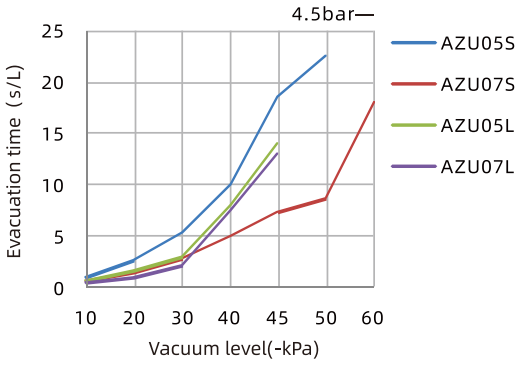
Evacuation time(s/L) to reach different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	45	50	60	Max. vacuum level -kPa
AZU05S	4.5	9	0.90	2.6	5.2	10.0	-	22.5	-	85
AZU07S	4.5	19	0.53	1.4	2.7	5.0	-	8.7	18	85
AZU05L	4.5	9	0.60	1.5	2.9	8.0	14.0	-	-	48
AZU07L	4.5	19	0.34	0.9	2.0	7.5	13.0	-	-	48

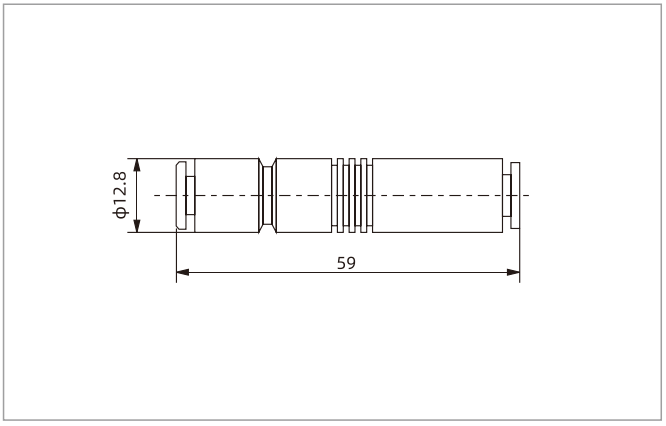
AZU Series

Basic Vacuum Generator

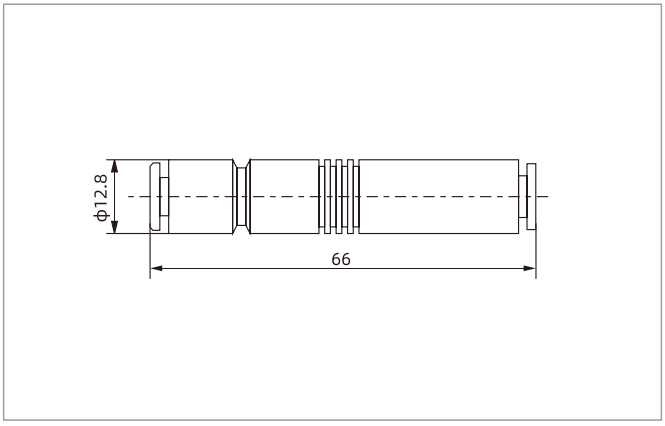




Dimensions(mm)



AZU05



AZU07

ACV Series

Basic Vacuum Generator

UNIVERSAL

RoHS

Features

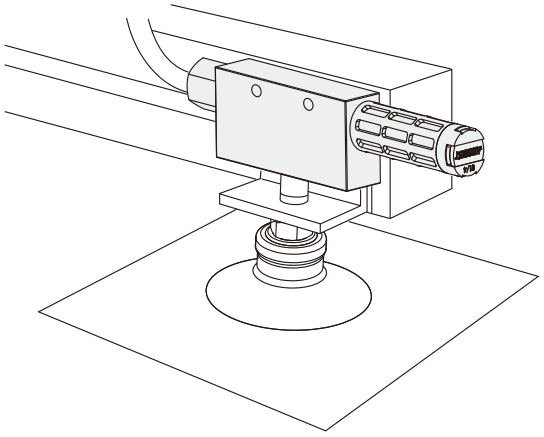
◇ Single stage and compact structure
◇ High vacuum level type and large flow type for option
◇ Optional pressure switch

Advantages

◇ Long lifetime and easy maintenance
◇ Meeting all kinds of working conditions
◇ Cost-effective and simple pressure switch for detecting directly

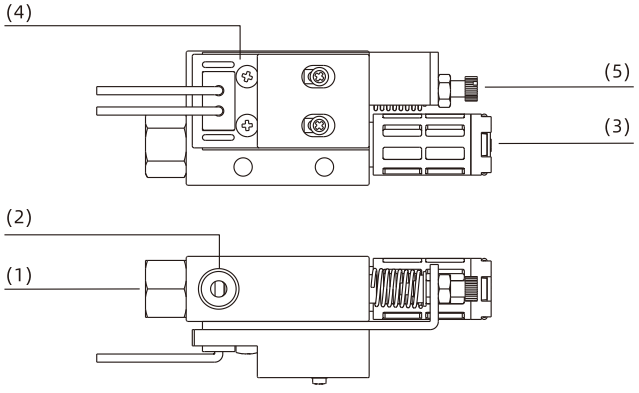
Applications

◇ Widely used in all kinds of vacuum systems
◇ Suitable for various handling operations such as automotive, metal sheet, wood, food and packaging, etc.
◇ High vacuum type and large flow type for different occasions
◇ Simple structure, the metal nozzle and body can be used in occasions of complicated environment, it is easy to maintain and clean



Structure

◇ (1) Air supply port
◇ (2) Vacuum port
◇ (3) Silencer
◇ (4) Pressure switch
◇ (5) Adjusting nut



ACV Series

Basic Vacuum Generator

How to order

ACV - 10 HS CK

① ② ③ ④

① Series	② Nozzle diameter	③ Specification	④ Pressure switch
ACV	05 - ϕ0.5mm	HS - High vacuum level type（-87kPa）	Nil - Without pressure switch
	10 - ϕ1.0mm	LS - Large vacuum flow type（-57kPa）	CK - With adjustable pressure switch
	15 - ϕ1.5mm		
	20 - ϕ2.0mm		
	25 - ϕ2.5mm		
	30 - ϕ3.0mm		

Selection

Model/Pressure switch Nil-Without pressure switch	CK-With adjustable pressure switch
ACV-05HS	ACV-05HSCK
ACV-10HS	ACV-10HSCK
ACV-15HS	ACV-15HSCK
ACV-20HS	ACV-20HSCK
ACV-25HS	-
ACV-30HS	-

Model/Pressure switch Nil-Without pressure switch	CK-With adjustable pressure switch
ACV-05LS	ACV-05LSCK
ACV-10LS	ACV-10LSCK
ACV-15LS	ACV-15LSCK
ACV-20LS	ACV-20LSCK
ACV-25LS	-
ACV-30LS	-

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 ℃	Weight(g) Without switch	Weight(g) CK	Recommended hose dia.(mm) Air supply port (P)	Recommended hose dia.(mm) Vacuum port (V)
ACV-05HS	5.0	87	7	13	68	0~60	80	120	ϕ8	ϕ8
ACV-10HS	5.0	90	27	44	68	0~60	80	120	ϕ8	ϕ8
ACV-15HS	5.0	90	63	100	72	0~60	140	190	ϕ8	ϕ8
ACV-20HS	5.0	90	110	180	72	0~60	350	460	ϕ8	ϕ10
ACV-25HS	5.0	90	160	265	75	0~60	730	700	ϕ10	ϕ12
ACV-30HS	5.0	90	225	385	75	0~60	870	846	ϕ10	ϕ12
ACV-05LS	5.0	57	10	13	68	0~60	75	115	ϕ8	ϕ8
ACV-10LS	5.0	57	36	44	68	0~60	75	115	ϕ8	ϕ8
ACV-15LS	5.0	57	95	100	72	0~60	135	180	ϕ8	ϕ8
ACV-20LS	5.0	57	170	180	72	0~60	330	440	ϕ8	ϕ10
ACV-25LS	5.0	57	250	265	75	0~60	710	680	ϕ10	ϕ12
ACV-30LS	5.0	57	350	385	75	0~60	840	816	ϕ10	ϕ12

ACV Series

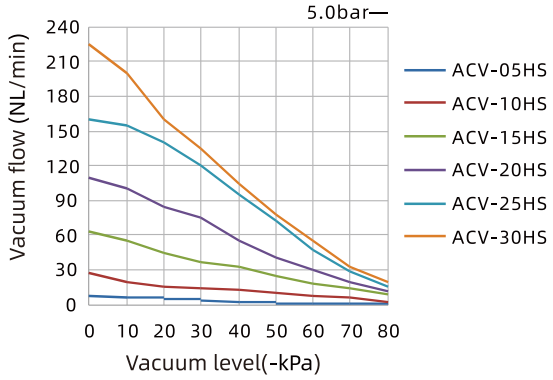
Basic Vacuum Generator

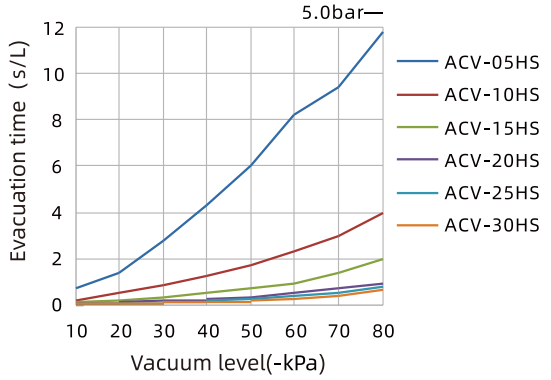
Vacuum flow(NL/min) at different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	Max. vacuum level -kPa
ACV-05HS	5.0	13	7.0	5.5	4.2	3.0	1.5	0.8	0.5	0.2	0.05	87
ACV-10HS	5.0	44	27.0	19.0	16.0	14.5	13.0	10.5	8.0	6.5	2.50	90
ACV-15HS	5.0	100	63.0	55.0	44.0	37.0	32.5	25.0	18.0	14.0	9.00	90
ACV-20HS	5.0	180	110.0	100.0	85.0	75.0	55.0	40.5	30.0	20.0	12.00	90
ACV-25HS	5.0	265	160.0	155.0	140.0	120.0	95.0	72.0	47.0	28.0	15.00	90
ACV-30HS	5.0	385	225.0	200.0	160.0	135.0	105.0	78.0	55.0	33.0	19.00	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
ACV-05HS	5.0	13	0.68	1.38	2.77	4.32	6.02	8.25	9.44	11.82	87
ACV-10HS	5.0	44	0.20	0.49	0.82	1.25	1.74	2.32	2.95	4.00	90
ACV-15HS	5.0	100	0.08	0.19	0.32	0.48	0.69	0.92	1.38	1.95	90
ACV-20HS	5.0	180	0.04	0.10	0.17	0.23	0.34	0.49	0.71	0.92	90
ACV-25HS	5.0	265	0.03	0.07	0.11	0.17	0.24	0.35	0.49	0.75	90
ACV-30HS	5.0	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)

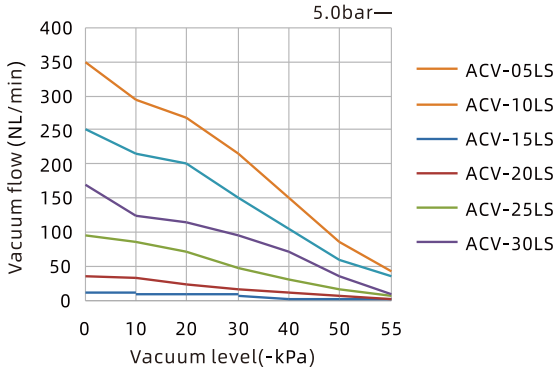
Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	55	Max. vacuum level -kPa
ACV-05LS	5.0	13	10.0	9.0	8.0	6.5	2.5	1.8	0.7	57
ACV-10LS	5.0	44	36.0	31.5	23.5	16.5	10.0	6.5	2.5	57
ACV-15LS	5.0	100	95.0	85.0	70.0	47.5	30.5	15.5	5.5	57
ACV-20LS	5.0	180	170.0	125.0	115.0	95.0	70.0	35.5	7.5	57
ACV-25LS	5.0	265	250.0	215.0	200.0	150.0	105.0	60.0	36.0	57
ACV-30LS	5.0	385	350.0	295.0	267.0	215.0	150.0	85.0	41.0	57

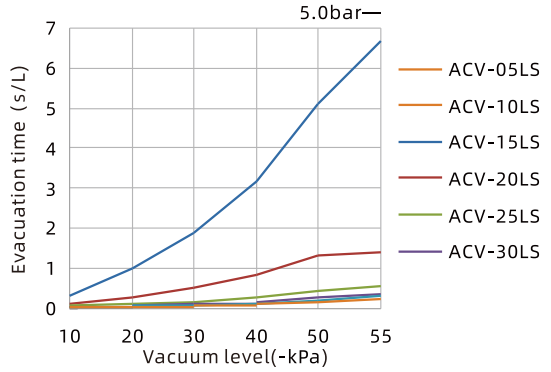
ACV Series

Basic 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	55	Max. vacuum level -kPa
ACV-05LS	5.0	13	0.31	0.98	1.89	3.17	5.12	6.70	57
ACV-10LS	5.0	44	0.12	0.28	0.51	0.83	1.32	1.40	57
ACV-15LS	5.0	100	0.45	0.10	0.15	0.26	0.42	0.56	57
ACV-20LS	5.0	180	0.03	0.06	0.11	0.14	0.25	0.34	57
ACV-25LS	5.0	265	0.02	0.05	0.08	0.12	0.18	0.30	57
ACV-30LS	5.0	385	0.02	0.04	0.06	0.09	0.13	0.22	57

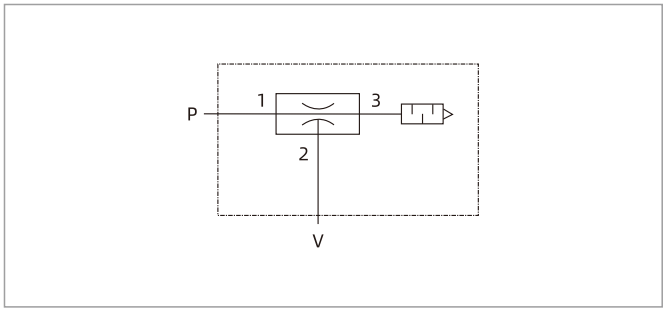




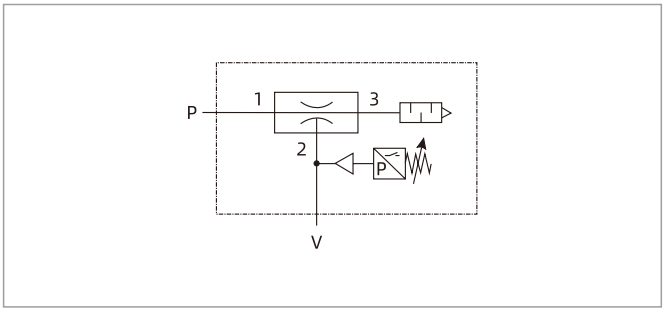
Technical parameters-Pressure switch

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

Air circuit schematic diagram



ACV Standard

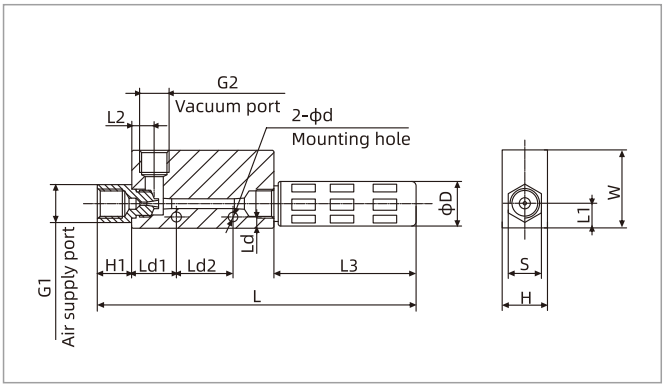


ACV - CK With pressure switch

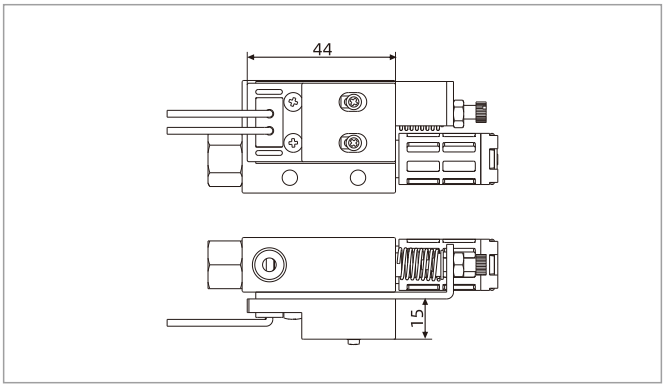
ACV Series

Basic Vacuum Generator

Dimensions(mm)



ACV Standard



ACV - CK With pressure switch

Model/Size	L	H	W	G1	H1	L1	S	G2	L2	ϕd	Ld	Ld1	Ld2	ϕD	L3
ACV-05	85	16	33	Rp1/8	10	10	14	Rp1/8	8	4.5	4.5	14	20	15	30
ACV-10	85	16	33	Rp1/8	10	10	14	Rp1/8	8	4.5	4.5	14	20	15	30
ACV-15	129	20	35	Rp1/4	15	11	17	Rp1/4	10	4.5	5.0	20	25	19	51
ACV-20	161	30	40	Rp1/4	20	15	24	Rp3/8	13	6.0	7.0	28	32	28	56
ACV-20CK	161	30	50	Rp1/4	20	15	24	Rp3/8	13	6.0	7.0	28	32	28	56
ACV-25	236	40	60	Rp3/8	17	20	27	Rp1/2	16	6.0	5.5	20	50	40	119
ACV-30	257	40	60	Rp1/2	20	20	30	Rp3/4	20	6.0	5.5	33	50	40	119

Repair kits

Model of silencer	Connection thread	Color	Applicable vacuum generator
ZSB-X-G1M	G1/8Male thread		ACV-05HS、10HS
ZSB-F-G1M	G1/8Male thread		ACV-05LS、10LS
ZSB-X-G2M	G1/4Male thread		ACV-15HS
ZSB-F-G2M	G1/4Male thread		ACV-15LS
ZSB-X-G4M	G1/2Male thread		ACV-20HS
ZSB-F-G4M	G1/2Male thread		ACV-20LS
ZSA-G6M	G3/4Male thread		ACV-25HS /LS、30HS / LS

ASBP Series

Basic Vacuum Generator

UNIVERSAL

RoHS

Features

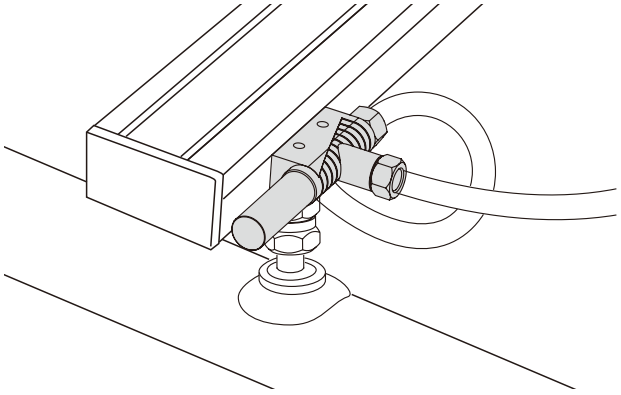
◇ Plastic housing, small size and light weight
◇ Nozzle diameter 1.0mm and 1.5mm
◇ Threaded connection

Advantages

◇ Suitable for fast handling
◇ Low air consumption
◇ Easy installation and space saving
◇ Low noise and easy maintenance

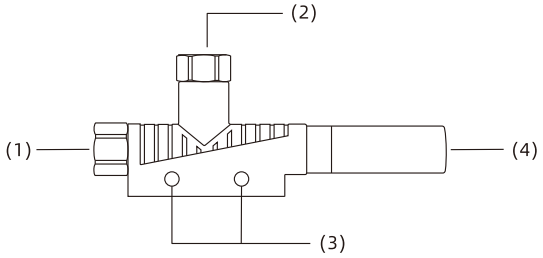
Applications

◇ Basic vacuum generator with plastic housing
◇ Compact structure, can be installed in row
◇ Handling of electronic components



Structure

◇ (1) Air supply port
◇ (2) Vacuum port
◇ (3) Mounting hole
◇ (4) Exhaust port



ASBP Series

Basic Vacuum Generator

How to order

ASBP 10
① ②

① Series	② Nozzle diameter
ASBP	10 - ϕ1.0mm
	15 - ϕ1.5mm

Selection

Model/Nozzle diameter	10	15
ASBP□	ASBP10	ASBP15

Technical parameters

Model	Nozzle diameter mm	Rated air supply pressure bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Air consumption NL/min	Noise level dB(A)	Working temperature ℃	Weight g	Recommended hose dia.(mm) Air supply port P	Vacuum port V
ASBP10	1.0	4.5	85	38	50	59	0~60	22	ϕ6	ϕ8
ASBP15	1.5	4.5	85	72	110	65	0~60	22	ϕ6	ϕ8

◇ Note: Max.operating pressure 7bar, standard operating pressure 4.5bar

ASBP Series

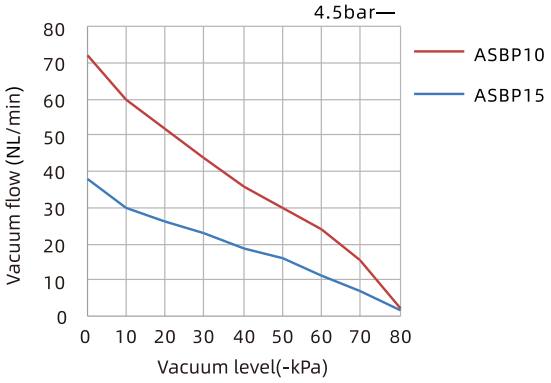
Basic Vacuum Generator

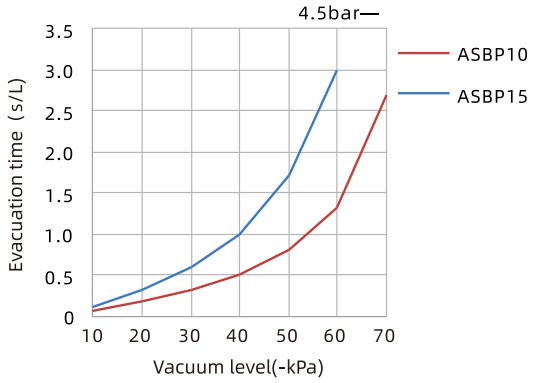
Vacuum flow(NL/min) at different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	Max. vacuum level -kPa
ASBP10	4.5	50	38	30	26	23	18.6	16	11	7.0	1.8	85
ASBP15	4.5	110	72	60	52	44	36.0	30	24	15.5	2.2	85

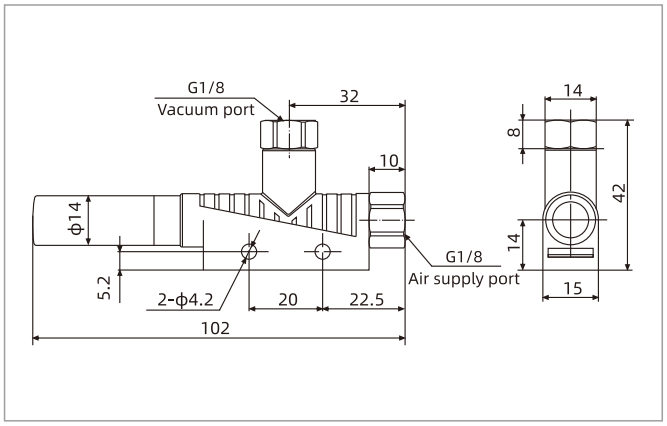
Evacuation time(s/L) to reach different vacuum levels(-kPa)

Model	Air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	Max. vacuum level -kPa
ASBP10	4.5	50	0.13	0.33	0.60	1.00	1.72	3.00	-	85
ASBP15	4.5	110	0.06	0.18	0.32	0.52	0.81	1.32	2.7	85





Dimensions(mm)



ASBP

ACP Series

Conveying Vacuum Generator

BIOPHARMING FOOD PACKAGING

Features

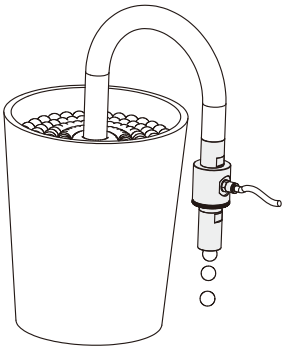
◇ Straight-through design, extremel large vacuum flow
◇ Vacuum flow is adjustable according to the working condition
◇ Different diameters are available

Advantages

◇ Handling of workpieces with high permeability, particle, powder, gas and fluid
◇ Vacuum flow can be manually adjusted according to the different working conditions

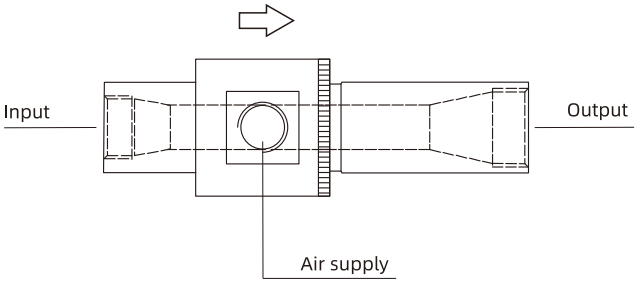
Applications

◇ Handling of loose materials such as textile and paper
◇ Conveying of grains such as wheat and corn
◇ Conveying of powder particles such as laundry detergent and plastic particles
◇ Removal of cutter chips during machining
◇ Suction of non-corrosive waste water and waste gas during industrial processing



Structure

◇ Straight-through design, can adsorb and transport different materials continuously
◇ All ports are connected with female thread



ACP Series

Conveying Vacuum Generator

How to order

ACP 250 S

① ② ③

① Series	② Specification	③ Material
ACP	250	Nil - Aluminum alloy
	375	S - Stainless steel
	500	
	750	

Selection

Model/Material Nil-Aluminum alloy	S - Stainless steel
ACP250	ACP250S
ACP375	ACP375S
ACP500	ACP500S
ACP750	ACP750S

Technical parameters

Air consumption(NL/min) at different vacuum levels(-kPa)

Model	Nozzle diameter mm	Air supply pressure bar	17	34	50	68	84	Working temperature °C	Weight (g) Aluminum alloy	Stainless steel
ACP250	6.5	5.5	112	169	233	276	342	-20~80	100	296
ACP375	9.5	5.5	176	327	485	595	825	-20~80	286	846
ACP500	13.0	5.5	340	625	795	940	1,280	-20~80	401	1,189
ACP750	19.0	5.5	650	875	1,250	1,790	2,550	-20~80	540	1,599

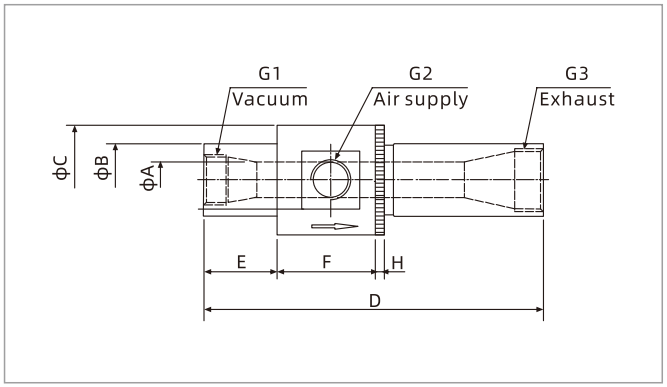
Vacuum flow(NL/min) at different vacuum levels(-kPa)

Model	Air supply pressure bar	17	34	50	68	84
ACP250	5.5	280	240	200	162	125
ACP375	5.5	846	735	620	520	395
ACP500	5.5	1,695	1,325	1,130	990	650
ACP750	5.5	3,390	2,460	1,970	1,440	1,130

ACP Series

Conveying Vacuum Generator

Dimensions(mm)



ACP

Model/Size	A	B	C	D	E	F	H	G1	G2	G3
ACP250	6.5	19	32	94~105	22	32	5	G1/4	G1/8	G1/4
ACP375	9.5	25	45	155~165	38	45	5	G3/8	G3/8	G1/2
ACP500	13.0	32	51	155~160	38	51	5	G1/2	G3/8	G3/4
ACP750	19.0	38	58	175~189	38	51	5	G3/4	G1/2	G1"

ACPF Series

Conveying Vacuum Generator

BIOPHARMING FOOD PACKAGING

Features

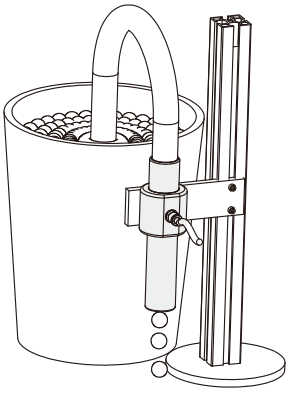
◇ Straight-through design, extremely large vacuum flow
◇ Different diameters are available, the largest diameter is 38mm

Advantages

◇ Handling of workpieces with high permeability, particle, powder, gas and fluid

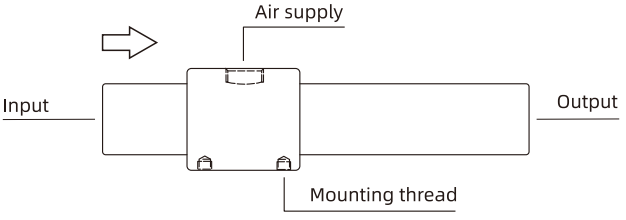
Applications

◇ Handling of loose materials such as textile and paper
◇ Conveying of grains such as wheat and corn
◇ Conveying of powder particles such as laundry detergent and plastic particles
◇ Removal of cutter chips during machining
◇ Suction of non-corrosive waste water and waste gas during industrial processing



Structure

◇ Straight-through design, can adsorb and transport different materials continuously
◇ With mounting threaded hole
◇ The ports of ACPF3-3 are threaded connection, and the others are connected by external steel wire hoses



ACPF Series

Conveying Vacuum Generator

How to order

ACPF 2-3 S

① ② ③

① Series	□ Specification	③ Material
ACPF	2-3	Nil- Aluminum alloy
	3-3	S-Stainless steel
	5-6	
	7-6	
	15-3	
	15-6	

Selection

Model/Material	
Nil-Aluminum alloy	S - Stainless steel
ACPF2-3	ACPF2-3S
ACPF3-3	ACPF3-3S
ACPF5-6	ACPF5-6S
ACPF7-6	ACPF7-6S
ACPF15-3	ACPF15-3S
ACPF15-6	ACPF15-6S

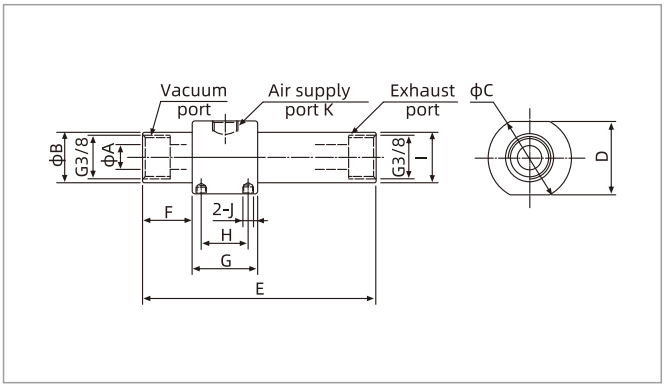
Technical parameters

Model	Nozzle diameter mm	Rated air supply pressure bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Air consumption NL/min		Working temperature ℃	Weight(g)	
					2.8bar	5.5bar		Aluminum alloy	Stainless steel
ACPF2-3	6.5	6.0	26.0	295	85	160	-20~80	85	252
ACPF3-3	9.5	6.0	16.0	425	95	170	-20~80	69	205
ACPF5-6	12.5	6.0	35.0	870	395	680	-20~80	170	505
ACPF7-6	19.0	6.0	28.0	1,825	790	1,365	-20~80	388	1,151
ACPF15-3	25.0	6.0	4.4	4,400	405	695	-20~80	519	1,537
ACPF15-6	38.0	6.0	9.0	5,610	790	1,365	-20~80	659	1,953

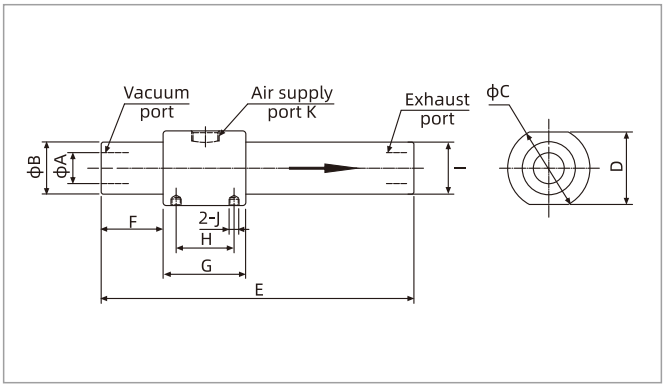
ACPF Series

Conveying Vacuum Generator

Dimensions(mm)



ACPF3-3



ACPF(Other sizes)

Model/Size	A	B	C	D	E	F	G	H	I	J	K
ACPF2-3	6.5	18.5	32	28	89	19	25	18	19.5	M4×0.7	G1/8
ACPF3-3	9.5	18.5	32	28	89	19	25	18	19.5	M4×0.7	G1/8
ACPF5-6	12.5	24.0	38	34	140	25	32	23	25.0	M4×0.7	G1/4
ACPF7-6	19.0	31.0	50	45	190	38	50	35	33.0	M4×0.7	G3/8
ACPF15-3	25.0	38.0	59	55	198	40	56	40	38.0	M4×0.7	G3/8
ACPF15-6	38.0	49.6	69	65	205	40	60	42	49.6	M4×0.7	G3/8

ACPS Series

Conveying Vacuum Generator

BIOPHARMING FOOD PACKAGING

Features

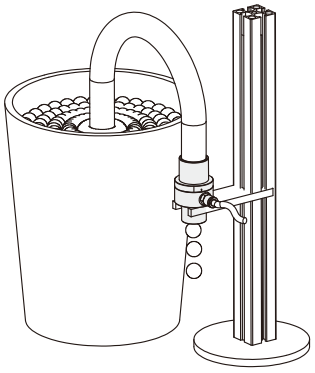
◇ Straight-through design, extremely large vacuum flow
◇ Different diameters are available

Advantages

◇ Handling of workpieces with high permeability, particle, powder, gas and fluid

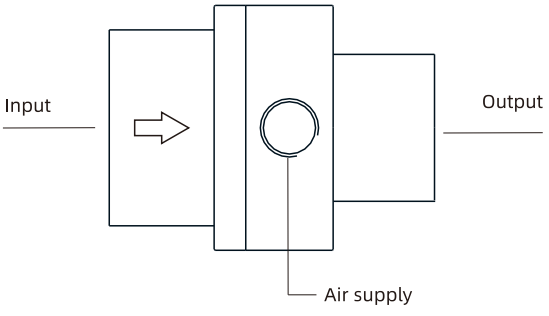
Applications

◇ Handling of loose materials such as textile and paper
◇ Conveying of grains such as wheat and corn
◇ Conveying of powder particles such as laundry detergent and plastic particles
◇ Removal of cutter chips during machining
◇ Suction of non-corrosive waste water and waste gas during industrial processing



Structure

◇ Straight-through design, can adsorb and transport different materials continuously
◇ Compressed air goes through the lateral annular gap



ACPS Series

Conveying Vacuum Generator

How to order

ACPS 10
① ②

① Series	② Nozzle diameter
ACPS	10 - ϕ10mm
	20 - ϕ20mm
	40 - ϕ40mm
	75 - ϕ75mm

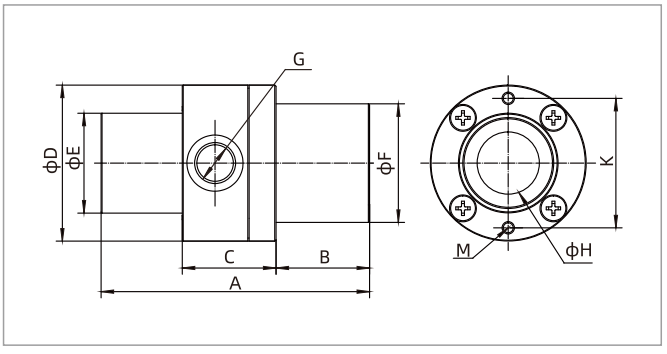
Selection

Model/Nozzle diameter	10	20	40	75
ACPS□	ACPS10	ACPS20	ACPS40	ACPS75

Technical parameters

Model	Nozzle diameter mm	Rated air supply pressure bar	Max. vacuum level -kPa	Max. vacuum flow NL/min	Air consumption NL/min	Working temperature ℃	Weight g
ACPS10	10	5.0	12	550	140	-20~80	77
ACPS20	20	5.0	4	1,375	265	-20~80	189
ACPS40	40	5.0	2	2,250	470	-20~80	522
ACPS75	75	5.0	1	8,640	876	-20~80	2,308

Dimensions(mm)



ACPS

Model/Size	A	B	C	D	E	F	G	H	K	M
ACPS10	70	23	21	37	19	19	G1/8	10	29.0	2-M4×0.7
ACPS20	86	30	30	50	32	38	G1/4	20	41.5	2-M4×0.7
ACPS40	94	30	34	84	52	75	G3/8	40	72.0	2-M4×0.7
ACPS75	180	34	65	140	100	125	G1/2	75	126.0	2-M6×1

SZ Series

Standard Suction Cup

ELECTRONICS

RoHS

Features

◇ Available in various shapes: U type, C type , B type and D type
◇ Simple structure
◇ Conductive material available
◇ Available in various sizes

B-Bellows type

D-Deep type

Advantages

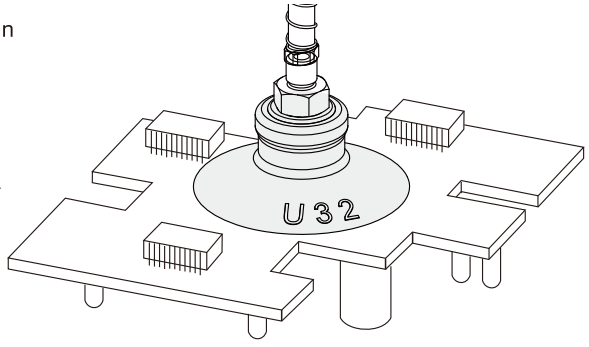
◇ Small size and light weight
◇ Suitable for workpieces of various sizes and shapes

U-Flat type

C-Flat type with ribs

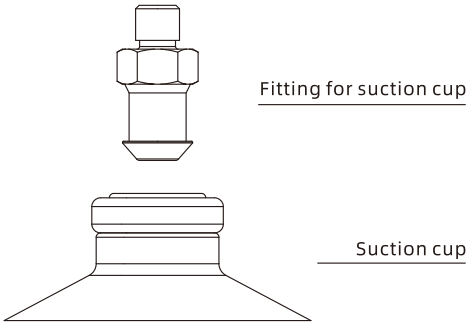
Applications

◇ U type suitable for workpieces with even surface and without deformation
◇ C type suitable for easily deformed workpieces
◇ B type suitable for workpieces with inclined surface
◇ D type suitable for spherical objects
◇ Suitable for handling of paper box, small sized semiconductor, spherical objects and food, ect.
◇ Conductive material suitable for 3C industry



Structure

◇ Split structure for easy replacement of wearing parts



SZ Series

Standard Suction Cup

How to order

SZ B 10 N
① ② ③ ④

① Series	② Suction cup type	③ Diameter		④ Material & Hardness	
SZ	U - Flat	2 - ϕ2mm	16 - ϕ16mm	N - NBR	50
	C - Flat with ribs	4 - ϕ4mm	20 - ϕ20mm	WS - White silicone	45
	B - 1.5 bellows	6 - ϕ6mm	25 - ϕ25mm	CN - Conductive NBR	•55
	D - Deep	8 - ϕ8mm	32 - ϕ32mm	CS - Conductive silicone	•55
		10 - ϕ10mm	40 - ϕ40mm	HP - Mark free rubber	50
		13 - ϕ13mm	50 - ϕ50mm		

◇ Note: HP material is not for all sizes. Please contact AIRBEST if need

Selection

Diameter of suction cup	Suction cup type U - Flat	C - Flat with ribs	B - 1.5 Bellows	D - Deep
ϕ2	SZU2□	-	-	-
ϕ4	SZU4□	-	-	-
ϕ6	SZU6□	-	SZB6□	-
ϕ8	SZU8□	-	SZB8□	-
ϕ10	SZU10□	SZC10□	SZB10□	SZD10□
ϕ13	SZU13□	SZC13□	SZB13□	-
ϕ16	SZU16□	SZC16□	SZB16□	SZD16□
ϕ20	SZU20□	SZC20□	SZB20□	-
ϕ25	SZU25□	SZC25□	SZB25□	SZD25□
ϕ32	SZU32□	SZC32□	SZB32□	-
ϕ40	SZU40□	SZC40□	SZB40□	SZD40□
ϕ50	SZU50□	SZC50□	SZB50□	-

SZ Series

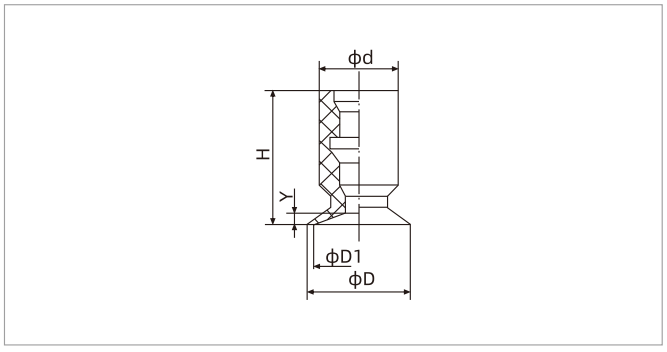
Standard Suction Cup

Technical parameters

Diameter of suction cup	Pull-out force N	Inner volume(cm^3) SZU	SZC	SZB	SZD	Recommended hose dia. mm	MPQ pcs
ϕ2	0.15	< 0.1	-	-	-	4	10
ϕ4	0.6	< 0.1	-	-	-	4	10
ϕ6	1.2	< 0.1	-	< 0.1	-	4	10
ϕ8	2.2	< 0.1	-	< 0.1	-	4	10
ϕ10	3.5	0.15	0.15	0.3	0.3	6	10
ϕ13	6	0.2	0.2	0.9	-	6	10
ϕ16	9.6	0.3	0.3	1.3	0.6	6	10
ϕ20	15	0.6	0.6	2.2	-	6	5
ϕ25	24	0.9	0.9	3.3	1.5	6	5
ϕ32	38	1.6	1.6	7.2	-	6	5
ϕ40	60	3.5	3.5	15	9	6	1
ϕ50	92	6	6	25	-	6	1

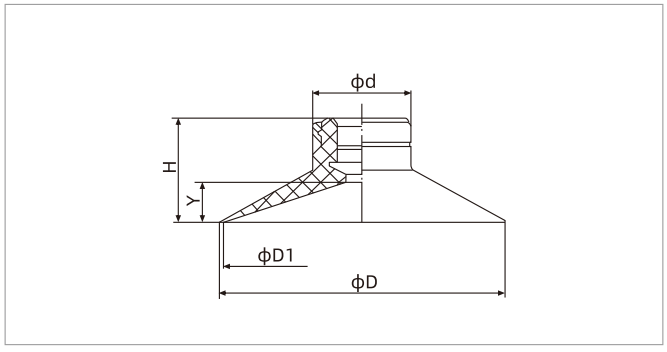
◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces.Recommend the length of vacuum hose to be as short as possible, max 2m.

Dimensions(mm)



SZU2-8

Model/Size	D	D1	H	d	Y	Weight g
SZU2□	2.6	2	12	7	0.5	0.3
SZU4□	4.8	4	12	7	0.8	0.3
SZU6□	7	6	12	7	0.8	0.4
SZU8□	9	8	12	7	1	0.4



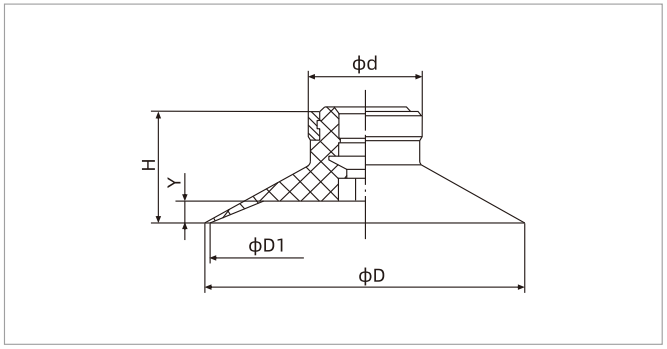
SZU10-50

Model/Size	D	D1	H	d	Y	Weight g
SZU10□	12	10	12	13	3	0.8
SZU13□	15	13	12	13	3	0.8
SZU16□	18	16	12.5	13	3.5	0.9
SZU20□	23	20	14	15	4	1.6
SZU25□	28	25	14	15	4	1.8
SZU32□	35	32	14.5	15	4.5	2.3
SZU40□	43	40	18.5	18	6.5	5.5
SZU50□	53	50	19.5	18	7.5	6.9

SZ Series

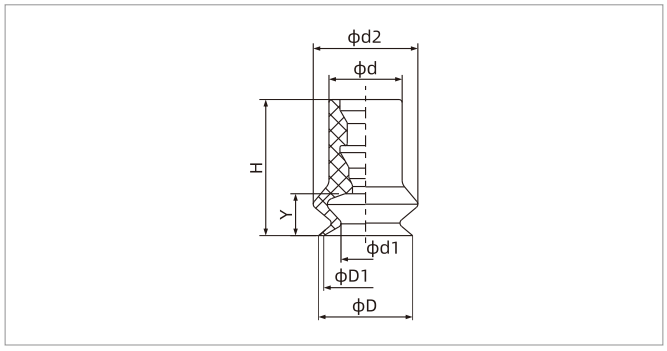
Standard Suction Cup

Dimensions(mm)



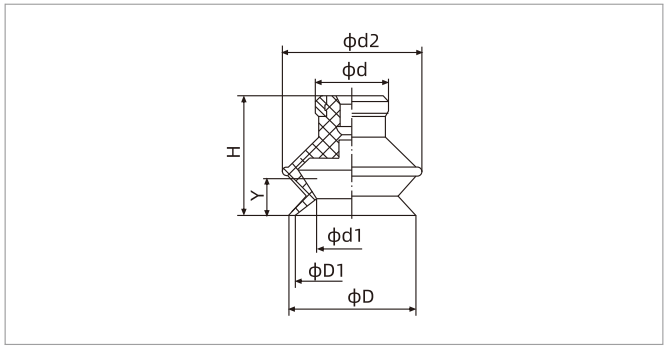
SZC10-50

Model/Size	D	D1	H	d	Y	Weight g
SZC10□	12	10	12	13	1.7	0.8
SZC13□	15	13	12	13	1.8	1.0
SZC16□	18	16	12.5	13	1.2	0.9
SZC20□	23	20	14	15	1.7	1.6
SZC25□	28	25	14	15	1.8	2.1
SZC32□	35	32	14.5	15	2.3	2.4
SZC40□	43	40	18.5	18	3.3	5.5
SZC50□	53	50	19.5	18	3.8	7.3



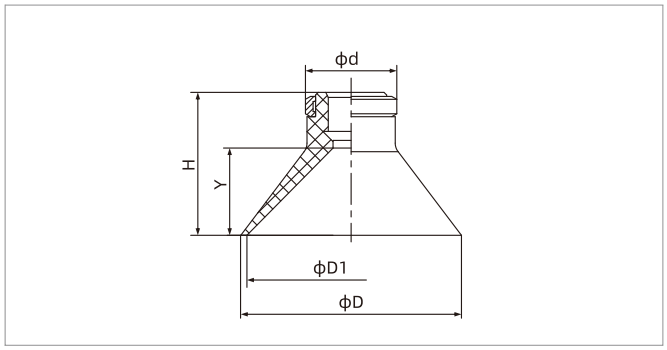
SZB6-8

Model/Size	D	D1	H	d	d1	d2	Y	Weight g
SZB6□	7	6	13	7	3.3	9.1	4	0.4
SZB8□	9	8	13	7	4.7	10.1	4	0.4



SZB10-50

Model/Size	D	D1	H	d	d1	d2	Y	Weight g
SZB10□	12	10	16	13	5.5	13.8	4	1.1
SZB13□	15	13	18.5	13	8.7	19	4	1.7
SZB16□	18	16	20	13	9.9	21	4	2.1
SZB20□	22	20	23.5	15	12.4	25	4	2.9
SZB25□	27	25	24	15	15.6	28	4	3.9
SZB32□	34	32	29	15	18.9	37	4	6.7
SZB40□	43	40	34	18	24.4	48	4	13.3
SZB50□	53	50	38	18	32.4	57	4	18.8



SZD10-40

Model/Size	D	D1	H	d	Y	Weight g
SZD10□	12	10	15	13	6	1.0
SZD16□	18	16	16	13	7	1.2
SZD25□	28	25	20	15	10	1.8
SZD40□	43.5	40	28	18	17	5.9

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

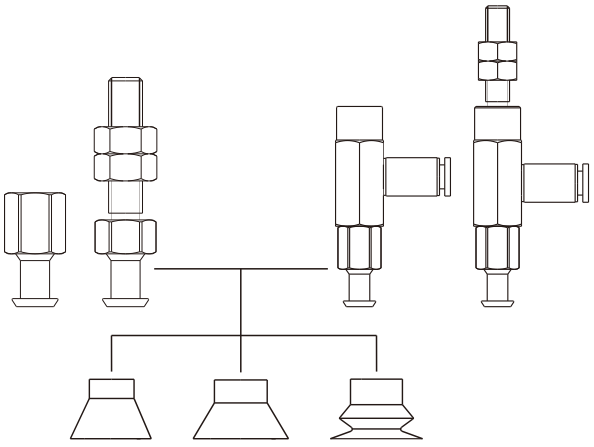
SZ Series

Suction Cup with Locking Fitting

Structure

◇ Consisting of replacement suction cup and locking fitting
◇ Plug-in fitting for suction cup
◇ Vertical vacuum port, male and female thread for mounting
◇ Lateral vacuum port, male and female thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SZU10N - LA6 - M5M
① ② ③

① Model	② Vacuum port direction	③ Mounting thread
SZU10N SZC SZB SZD	Nil - Vertical LA4 - Lateral, one-touch fitting ϕ4 hose LA6 - Lateral, one-touch fitting ϕ6 hose	M5M - M5×0.8 male thread M6M - M6×1 male thread M8M - M8×1 male thread M5F - M5×0.8 female thread M8F - M8×1.25 female thread

◇ Please refer to page 155 for suction cup selection

Selection

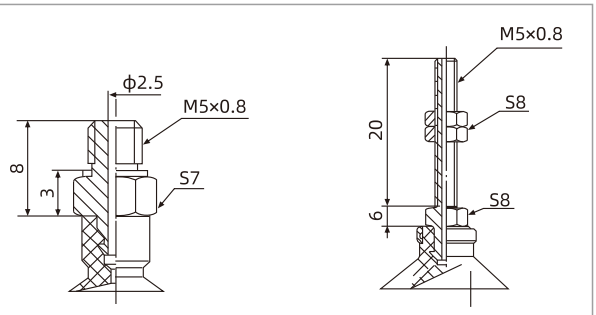
Diameter of suction cup	Vacuum port direction			Mounting thread				
	Nil	LA4	LA6	M5M	M6M	M8M	M5F	M8F
2-8	●	●	●	●	-	-	●	-
10-16	●	●	●	●	-	-	●	-
20-32	●	●	●	-	●	-	●	-
40-50	●	-	●	-	-	●	-	●

◇ Note: "●" default, in stock, "-" unavailable

SZ Series

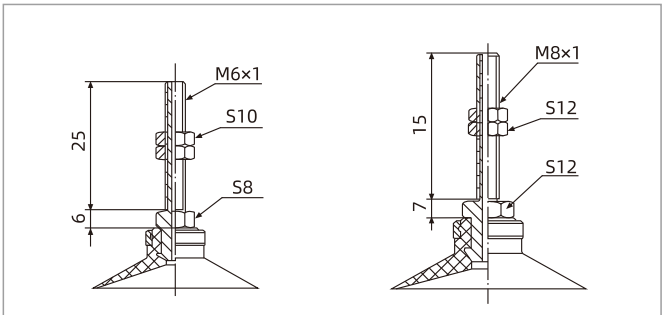
Suction Cup with Locking Fitting

Dimensions(mm)



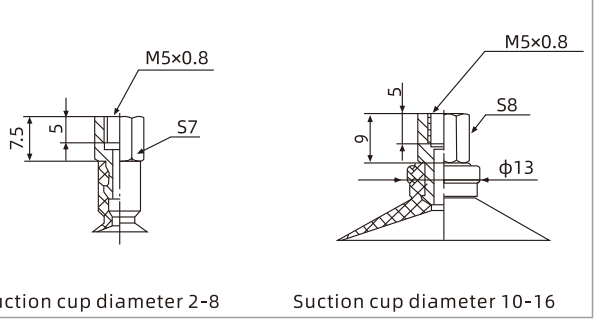
Suction cup diameter 2-8　　Suction cup diameter 10-16

Vertical-Male thread connection



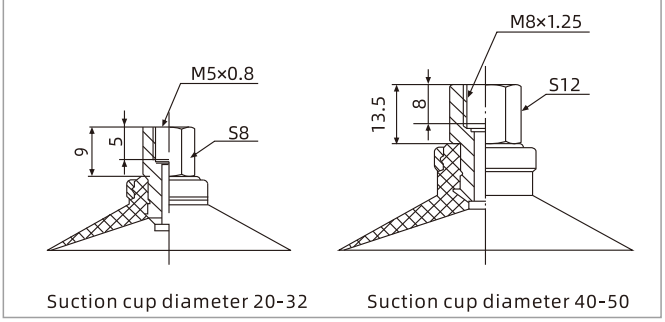
Suction cup diameter 20-32　　Suction cup diameter 40-50

Vertical-Male thread connection



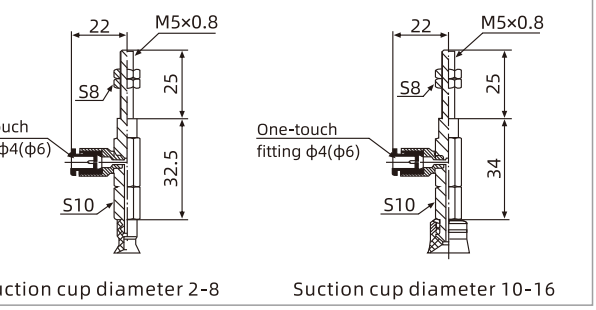
Suction cup diameter 2-8　　Suction cup diameter 10-16

Vertical-Female thread connection



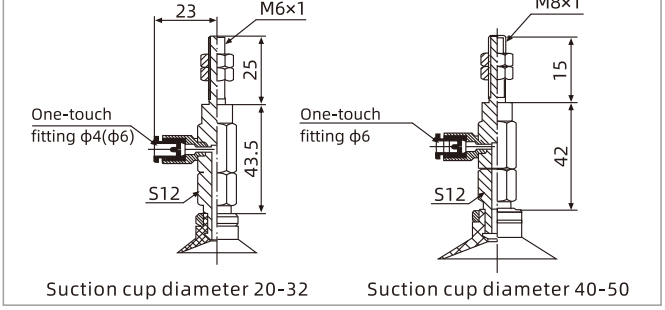
Suction cup diameter 20-32　　Suction cup diameter 40-50

Vertical-Female thread connection



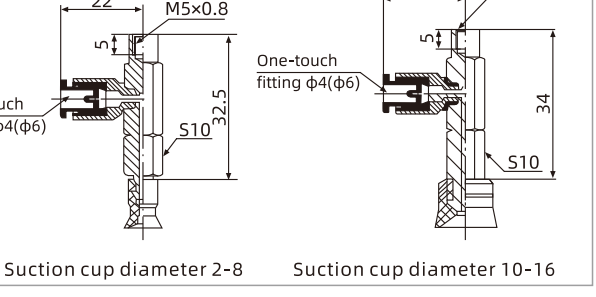
Suction cup diameter 2-8　　Suction cup diameter 10-16

Lateral-Male thread connection



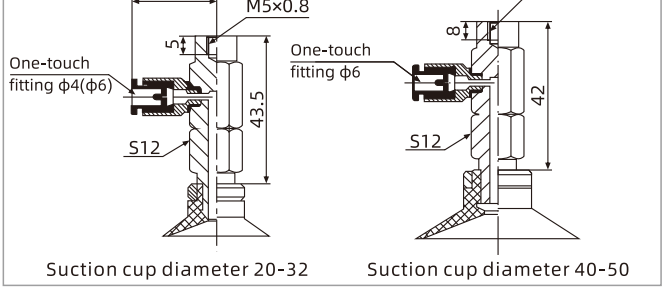
Suction cup diameter 20-32　　Suction cup diameter 40-50

Lateral-Male thread connection



Suction cup diameter 2-8　　Suction cup diameter 10-16

Lateral-Female thread connection



Suction cup diameter 20-32　　Suction cup diameter 40-50

Lateral-Female thread connection

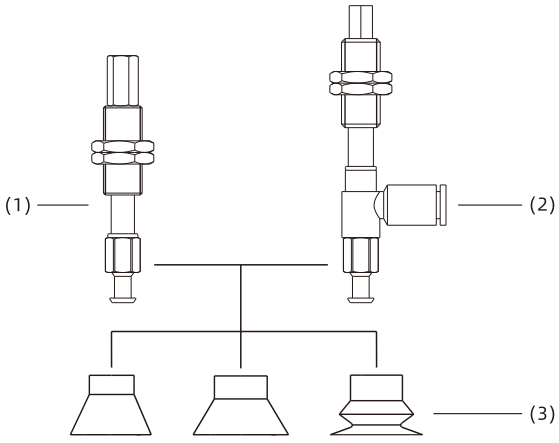
SZ Series

Suction Cup with Level Compensator

Structure

◇ Consisting of replacement suction cup(3) and level compensator
◇ Plug-in fitting for suction cup
◇ Vertical vacuum port(1), male thread for mounting
◇ Lateral vacuum port(2), male thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SZU10N - E I 10 R A6 - M10
① ② ③ ④ ⑤ ⑥ ⑦

① Model	② Level compensator type	③ Buffer type	④ Buffer stroke	⑤ Rotary type	⑥ Vacuum port connection	⑦ Mounting thread
SZU10N	E - PSPE Series	I - Internal spring	6 20	Nil - Vertical rotating	Nil - M5×0.8 female thread	M8 - M8×1
SZC			10 30	R - Vertical non-rotating	A4 - one-touch fitting ϕ4 hose	M10 - M10×1
SZB			15 40	L - Lateral rotating	A6 - one-touch fitting ϕ6 hose	M14 - M14×1
SZD			25 50	B - Lateral non-rotating	B4 - Pagoda fitting ϕ4 hose	
					B6 - Pagoda fitting ϕ6 hose	

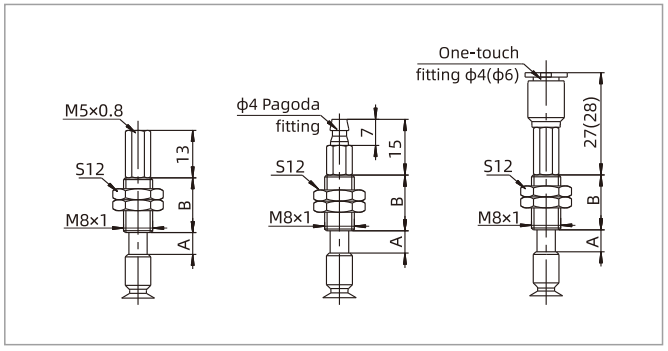
◇ Please refer to page 155 for suction cup selection

Selection

Diameter of suction cup	Buffer stroke	Rotary type				Vacuum port connection					Mounting thread
		Nil	R	L	B	Nil	A4	A6	B4	B6	
2-8	6, 10, 15, 25	●	●	●	●	●	●	●	●	-	M8
10-32	10, 20, 30, 40, 50	●	●	●	●	●	●	●	-	●	M10
40-50	10, 20, 30, 50	●	-	-	-	●	-	-	-	-	M14

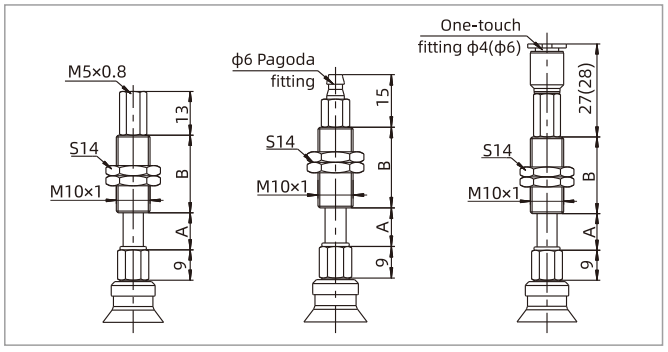
◇ Note: "●" default, in stock, "-" unavailable

Dimensions(mm)



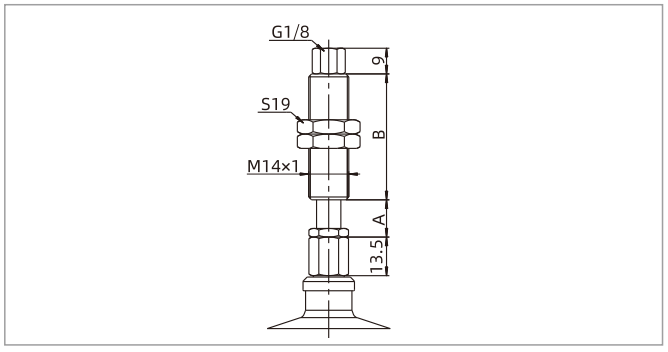
Vertical direction Suction cup diameter 2-8

Suction cup dia./ Size	A	B	Buffer stroke	F1 (N)	F2 (N)
2-8	6	15	6	0.8	1.2
	11	43	10	0.8	1.2
	16	43	15	0.8	1.2
	26	43	25	0.8	1.2



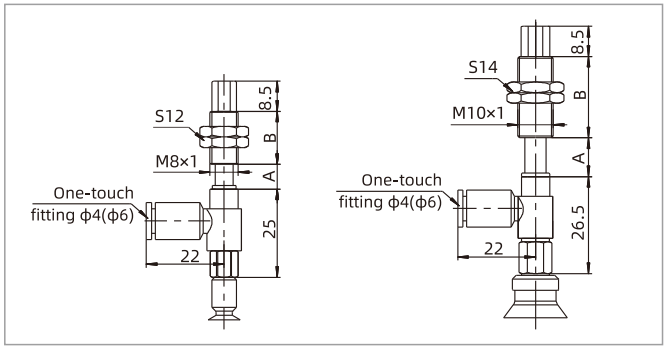
Vertical direction Suction cup diameter 10-32

Suction cup dia./ Size	A	B	Buffer stroke	F1 (N)	F2 (N)
10-32	11.5	23	10	1.0	3.0
	21.5	51	20	1.0	3.0
	31.5	51	30	1.0	3.0
	41.5	77	40	1.0	3.0
	51.5	77	50	1.0	3.0



Vertical direction Suction cup diameter 40-50

Suction cup dia./ Size	A	B	Buffer stroke	F1 (N)	F2 (N)
40-50	13	44	10	2.0	5.5
	23	44	20	2.0	5.5
	33	44	30	2.0	5.5
	53	75	50	2.0	5.5



Lateral direction Suction cup diameter 2-8 Suction cup diameter 10-32

Suction cup dia./ Size	A	B	Buffer stroke	F1 (N)	F2 (N)
2-8	8	15	6	0.8	1.2
	11	43	10	0.8	1.2
	16	43	15	0.8	1.2
	26	43	25	0.8	1.2
10-32	11	23	10	1.0	3.0
	21	51	20	1.0	3.0
	31	51	30	1.0	3.0
	41	77	40	1.0	3.0
	51	77	50	1.0	3.0

◇ Note: "F1" means spring force at 0 stroke, "F2" means spring force at max. stroke

SP3 Series

Suction Cup

ELECTRONICS

RoHS

Features

◇ Suction cups of same diameter among U/C/B types use same fitting
◇ Small size, short height
◇ Available in conductive material

U-Flat

C-Flat with ribs

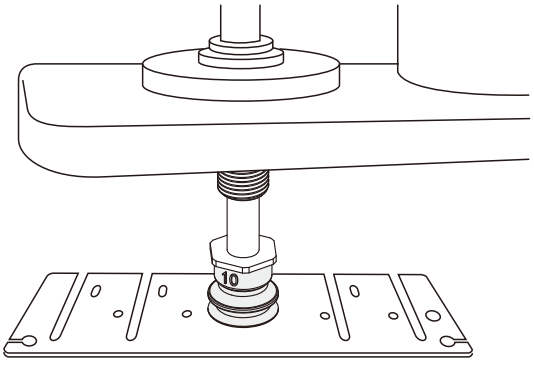
Advantages

◇ Used in various occasions, suction cups are interchangeable
◇ Suitable for occasions with limited space
◇ Discharge static electricity gently to protect workpieces from damage

B-1.5 bellows

Applications

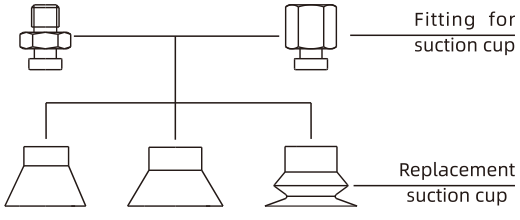
◇ U type suitable for workpieces with even surface and without deformation
◇ C type suitable for easily deformed workpieces
◇ B type suitable for workpieces with inclined surface
◇ Suitable for handling of workpieces with small size and light weight
◇ Conductive material suitable for 3C industry



Structure

◇ Split structure for easy replacement of wearing parts

In the same series, replacement suction cup and locking fitting can be combined as required



SP3 Series

Suction Cup

How to order

SP3 B 10 N - M5M

① ② ③ ④ ⑤

① Series	② Suction cup type	③ Diameter		④ Material & Hardness		⑤ Connection thread
SP3	U - Flat	1.5 - ϕ1.5mm	2 - ϕ2mm	N - NBR	55	Nil - Suction cup only
	C - Flat with ribs	3.5 - ϕ3.5mm	4 - ϕ4mm	WS - White silicone	50	M3F - M3×0.5 female thread
	B - 1.5 Bellows	10 - ϕ10mm	6 - ϕ6mm	CN - Conductive NBR	•55	M5F - M5×0.8 female thread
		13 - ϕ13mm	8 - ϕ8mm	CS - Conductive silicone	•55	M3M - M3×0.5 male thread
		16 - ϕ16mm		HP - Mark free rubber	55	M5M - M5×0.8 male thread

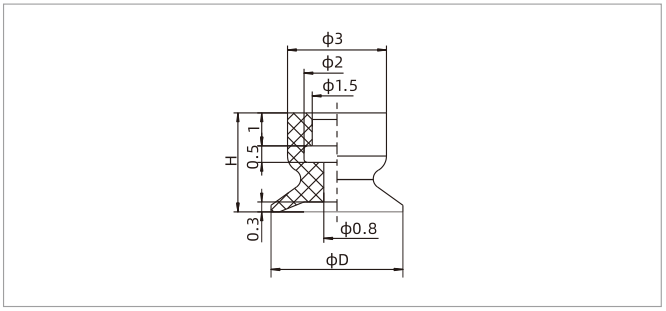
◇ Note: HP material is not for all sizes. Please contact AIRBEST if need

Selection

Diameter of sution cup	Suction cup type U	C	B	Connection thread M3F	M3M	M5F	M5M	MPQ pcs
ϕ1.5	●	-	-	●	●	-	-	10
ϕ2	●	-	-	●	●	-	-	10
ϕ3.5	●	-	-	●	●	-	-	10
ϕ4	-	●	●	-	-	●	●	10
ϕ6	-	●	●	-	-	●	●	10
ϕ8	-	●	●	-	-	●	●	10
ϕ10	-	●	●	-	-	●	●	10
ϕ13	-	●	●	-	-	●	●	10
ϕ16	-	●	●	-	-	●	●	10

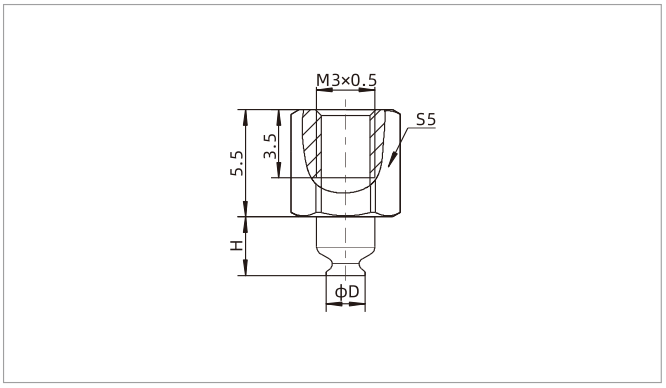
◇ Note: "●" default, in stock, "-" unavailable

Dimensions(mm) - U type



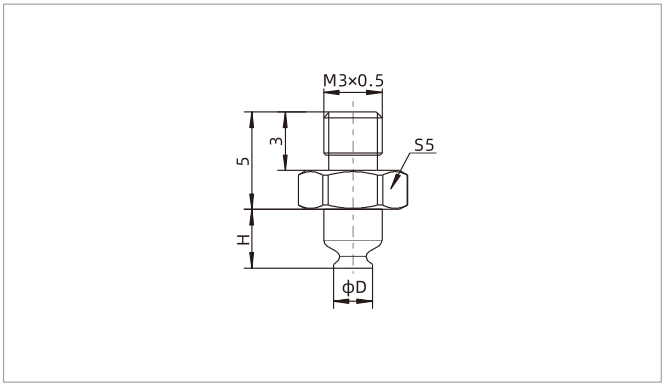
SP3U1.5-3.5

Model/Size	D	H	Weight g
SP3U1.5□	2.0	3.0	0.1
SP3U2□	2.5	3.0	0.1
SP3U3.5□	4.0	3.0	0.1



SP3U1.5-3.5 F - Female thread connection

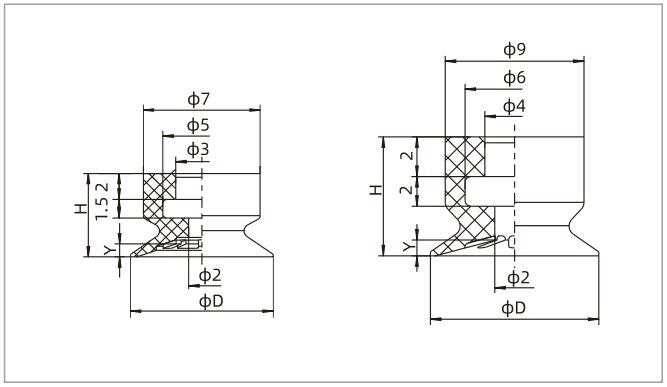
Model/Size	D	H	Weight g
SP3U1.5□-M3F	2.0	3.0	0.9
SP3U2□-M3F	2.5	3.0	0.9
SP3U3.5□-M3F	4.0	3.0	0.9



SP3U1.5-3.5 M - Male thread connection

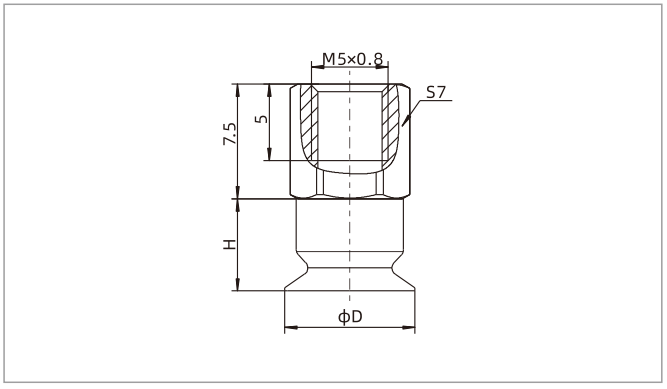
Model/Size	D	H	Weight g
SP3U1.5□-M3M	2.0	3.0	0.6
SP3U2□-M3M	2.5	3.0	0.6
SP3U3.5□-M3M	4.0	3.0	0.6

Dimensions(mm) - C type



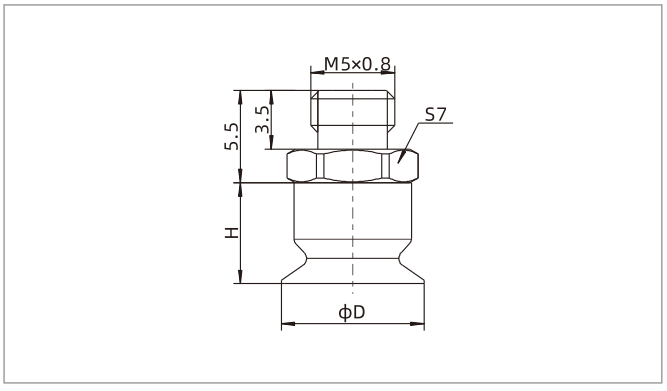
SP3C4-8 SP3C10-16

Model/Size	D	H	Y	Weight g
SP3C4□	4.5	6.0	0.5	0.3
SP3C6□	6.5	6.0	0.8	0.3
SP3C8□	8.5	6.0	0.8	0.3
SP3C10□	11.0	7.0	1.0	0.6
SP3C13□	14.0	7.0	1.2	0.7
SP3C16□	17.0	7.0	1.2	0.8



SP3C4-16 F - Female thread connection

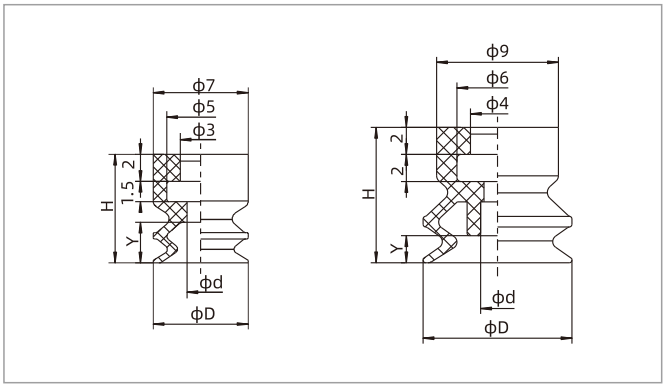
Model/Size	D	H	Weight g
SP3C4□-M5F	4.5	6.0	2.3
SP3C6□-M5F	6.5	6.0	2.3
SP3C8□-M5F	8.5	6.0	2.3
SP3C10□-M5F	11.0	7.0	5.7
SP3C13□-M5F	14.0	7.0	5.8
SP3C16□-M5F	17.0	7.0	5.9



SP3C4-16 M - Male thread connection

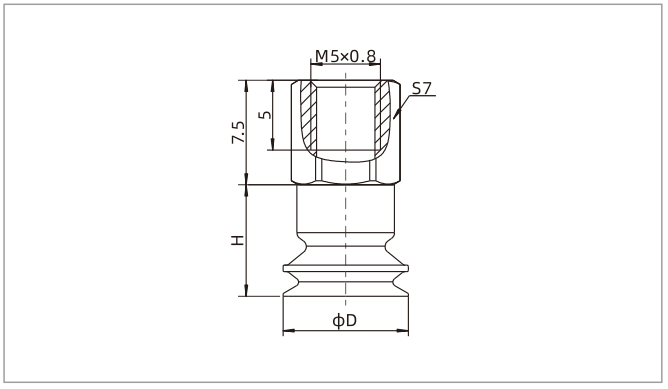
Model/Size	D	H	Weight g
SP3C4□-M5M	4.5	6.0	1.7
SP3C6□-M5M	6.5	6.0	1.7
SP3C8□-M5M	8.5	6.0	1.7
SP3C10□-M5M	11.0	7.0	3.0
SP3C13□-M5M	14.0	7.0	3.1
SP3C16□-M5M	17.0	7.0	3.2

Dimensions(mm) - B type



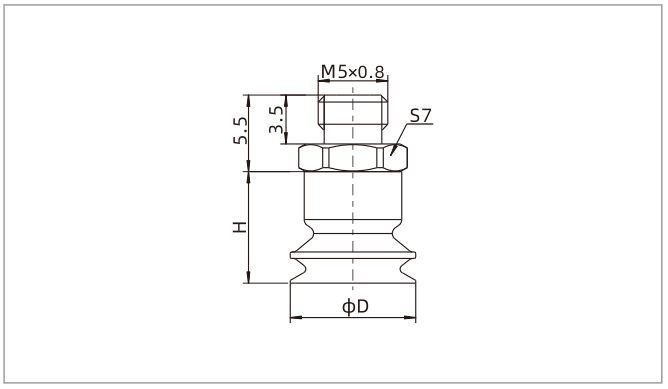
SP3B4-8 SP3B10-16

Model/Size	D	H	d	Y	Weight g
SP3B4□	4.5	8.0	1.8	2.2	0.3
SP3B6□	7.0	8.0	2.0	3.0	0.3
SP3B8□	9.0	8.0	2.0	3.0	0.4
SP3B10□	11.0	10.0	2.0	2.0	0.8
SP3B13□	14.0	10.0	3.0	2.0	1.0
SP3B16□	17.0	10.0	3.0	2.0	1.1



SP3B4-16 F - Female thread connection

Model/Size	D	H	Weight g
SP3B4□-M5F	4.5	8.0	2.3
SP3B6□-M5F	7.0	8.0	2.3
SP3B8□-M5F	9.0	8.0	2.4
SP3B10□-M5F	11.0	10.0	5.9
SP3B13□-M5F	14.0	10.0	6.1
SP3B16□-M5F	17.0	10.0	6.2



SP3B4-16 M - Male thread connection

Model/Size	D	H	Weight g
SP3B4□-M5M	4.5	8.0	1.7
SP3B6□-M5M	7.0	8.0	1.7
SP3B8□-M5M	9.0	8.0	1.8
SP3B10□-M5M	11.0	10.0	3.2
SP3B13□-M5M	14.0	10.0	3.4
SP3B16□-M5M	17.0	10.0	3.5

◇ Note: The dimensional tolerance conforms to the GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model Female thread	Male thread	Applicable suction cup
Fitting for suction cup	PJS-M3F-ST0.5	PJS-M3M-ST0.5	SP3U1.5, 2, 3.5
	PJS-M5F-ST1.5	PJS-M5M-ST1.5	SP3C4, 6, 8; SP3B4, 6, 8
	PJS-M5F-ST2	PJS-M5M-ST2-A	SP3C10, 13, 16; SP3B10, 13, 16

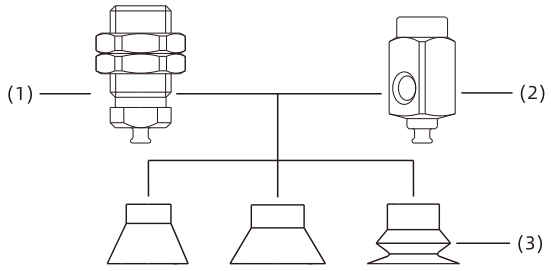
SP3 Series

Suction Cup with Locking Fitting

Structure

◇ Consisting of replacement suction cup(3) and locking fitting(1 or 2)
◇ Plug-in fitting for suction cup
◇ Vertical vacuum port(1), male thread for mounting
◇ Lateral vacuum port(2), female thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SP3B10N - L M5F - M5F
① ② ③ ④

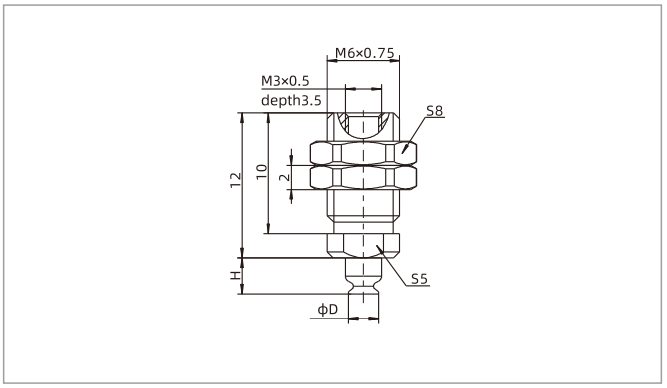
① Model	② Vacuum port direction	③ Vacuum port connection	④ Mounting thread
SP3B10N	Nil - Vertical	M3F - M3×0.5 female thread	M3F - M3×0.5 female thread
	L - Lateral	M5F - M5×0.8 female thread	M5F - M5×0.8 female thread
			M6M - M6×0.75 male thread
			M10M - M10×1 male thread
			M12M - M12×1 male thread

◇ Please refer to page 163 for suction cup selection

Selection

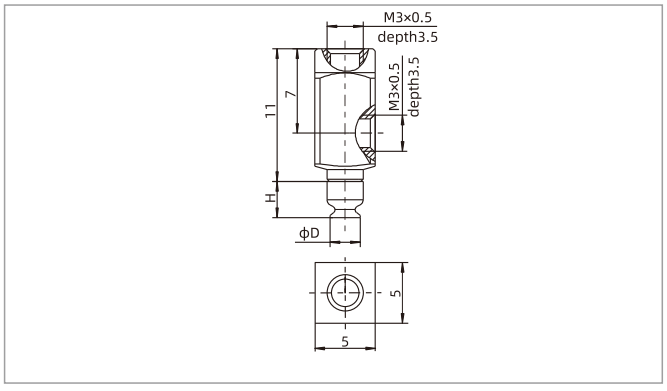
Model	Nil-Vertical Vacuum port connection	Mounting thread	L- Lateral Vacuum port connection	Mounting thread
SP3U1.5-3.5	M3F	M6M	M3F	M3F
SP3C4-8	M5F	M10M	M5F	M5F
SP3C10-16	M5F	M12M	M5F	M5F
SP3B4-8	M5F	M10M	M5F	M5F
SP3B10-16	M5F	M12M	M5F	M5F

Dimensions(mm) - U type



SP3U1.5-3.5 Vertical-Male thread connection

Model/Size	D	H	Weight g
SP3U1.5□-M3F-M6M	2.0	3.0	2.8
SP3U2□-M3F-M6M	2.5	3.0	2.8
SP3U3.5□-M3F-M6M	4.0	3.0	2.8



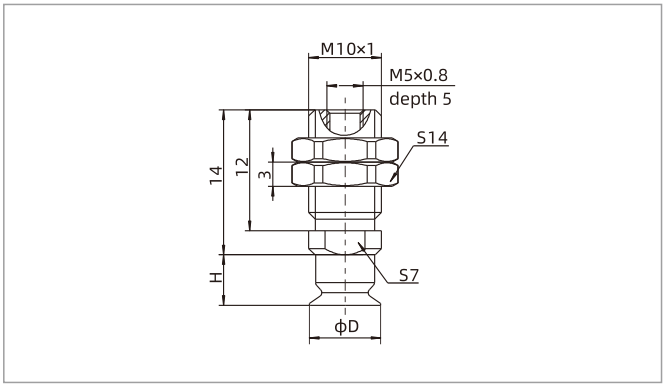
SP3U1.5-3.5 Lateral-Female thread connection

Model/Size	D	H	Weight g
SP3U1.5□-LM3F-M3F	2.0	3.0	1.9
SP3U2□-LM3F-M3F	2.5	3.0	1.9
SP3U3.5□-LM3F-M3F	4.0	3.0	1.9

SP3 Series

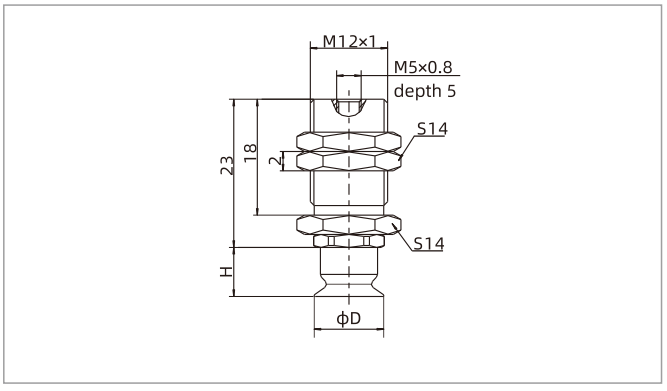
Suction Cup with Locking Fitting

Dimensions(mm) - C type



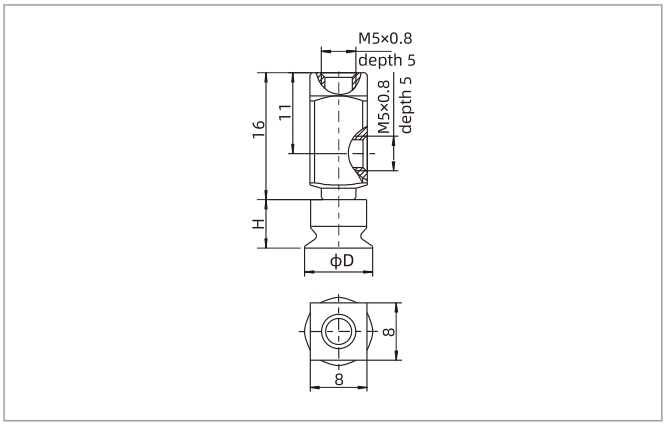
SP3C4-8 Vertical-Male thread connection

Model/Size	D	H	Weight g
SP3C4□-M5F-M10M	4.5	6.0	11.0
SP3C6□-M5F-M10M	6.5	6.0	11.0
SP3C8□-M5F-M10M	8.5	6.0	11.0



SP3C10-16 Vertical-Male thread connection

Model/Size	D	H	Weight g
SP3C10□-M5F-M12M	11.0	7.0	18.8
SP3C13□-M5F-M12M	14.0	7.0	18.9
SP3C16□-M5F-M12M	17.0	7.0	19.0



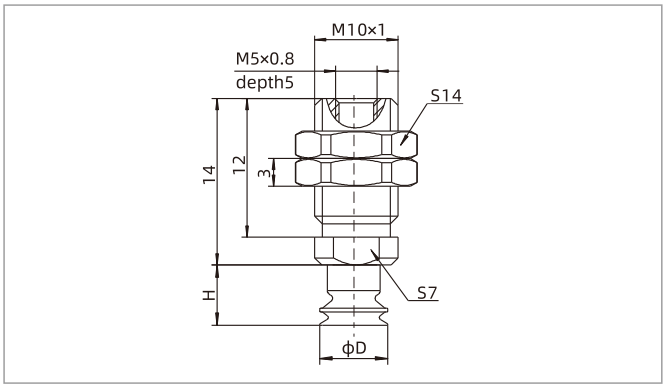
SP3C4-16 Lateral-Female thread connection

Model/Size	D	H	Weight g
SP3C4□-LM5F-M5F	4.5	6.0	7.0
SP3C6□-LM5F-M5F	6.5	6.0	7.0
SP3C8□-LM5F-M5F	8.5	6.0	7.0
SP3C10□-LM5F-M5F	11.0	7.0	7.7
SP3C13□-LM5F-M5F	14.0	7.0	7.8
SP3C16□-LM5F-M5F	17.0	7.0	7.9

SP3 Series

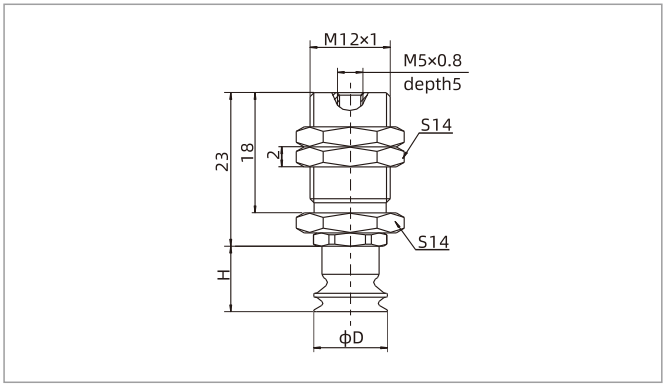
Suction Cup with Locking Fitting

Dimensions(mm) -B type



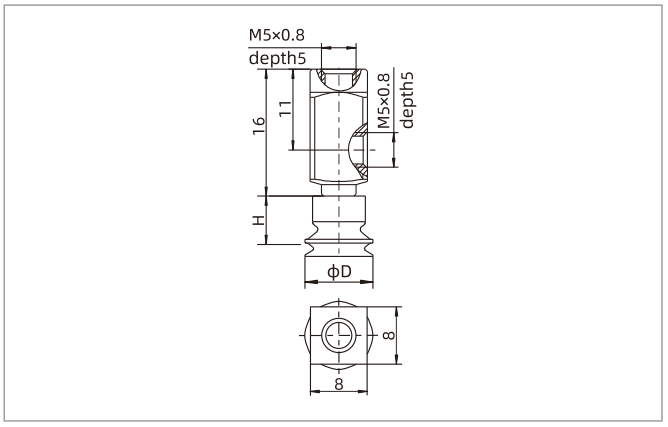
SP3B□□-M5F-M10M

Model/Size	D	H	Weight g
SP3B4□-M5F-M10M	4.5	8.0	11.0
SP3B6□-M5F-M10M	7.0	8.0	11.0
SP3B8□-M5F-M10M	9.0	8.0	11.1



SP3B□□-M5F-M12M

Model/Size	D	H	Weight g
SP3B10□-M5F-M12M	11.0	10.0	19.0
SP3B13□-M5F-M12M	14.0	10.0	19.2
SP3B16□-M5F-M12M	17.0	10.0	19.3



SP3B□□-LM5F-M5F

Model/Size	D	H	Weight g
SP3B4□-LM5F-M5F	4.5	8.0	7.0
SP3B6□-LM5F-M5F	7.0	8.0	7.0
SP3B8□-LM5F-M5F	9.0	8.0	7.1
SP3B10□-LM5F-M5F	11.0	10.0	7.9
SP3B13□-LM5F-M5F	14.0	10.0	8.1
SP3B16□-LM5F-M5F	17.0	10.0	8.2

Mounting parts

Item	Model Vertical direction	Lateral direction	Applicable suction cup
Locking fitting	PJF-M3F-M6M-ST0.5	PJF-LM3F-M3F-ST0.5	SP3U1.5, 2, 3.5
	PJF-M5F-M10M-ST1.5	PJF-LM5F-M5F-ST1.5	SP3C4, 6, 8; SP3B4, 6, 8
	PJF-M5F-M12M-ST2	PJF-LM5F-M5F-ST2	SP3C10, 13, 16; SP3B10, 13, 16

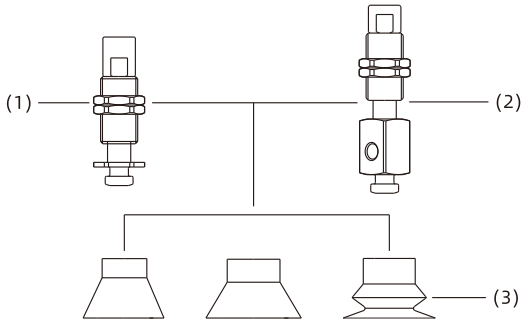
SP3 Series

Suction Cup with Level Compensator

Structure

◇ Consisting of replacement suction cup(3) and level compensator(1 or 2)
◇ Plug-in fitting for suction cup
◇ Vertical vacuum port(1), male thread for mounting
◇ Lateral vacuum port(2), male thread for mounting

In the same series, replacement suction cup and level compensator can be combined as required



How to order

SP3B10N - I 10 R - M8
① ② ③ ④ ⑤

① Model	② Vacuum port direction	③ Buffer stroke	④ Rotary type	⑤ Mounting thread
SP3B10N	I - Vertical L - Lateral	3 15 6 20 10	Nil - Rotating R - Non-rotating	M6 - M6×0.75 M8 - M8×0.75

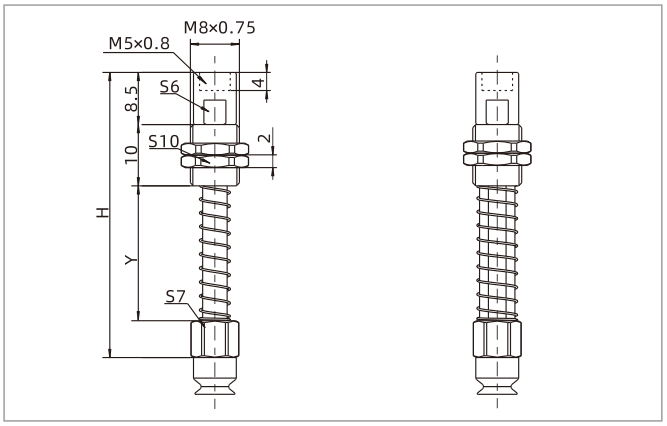
◇ Please refer to page 163 for suction cup selection

Selection

Model	Vacuum port direction		Rotary type		Buffer stroke	Mounting thread
	I-Vertical	L-Lateral	Nil-Rotating	R-Non-rotating		
SP3U1.5-3.5	●	●	●	-	3 6	M6
SP3U1.5-3.5	●	●	-	●	3 6	M8
SP3C4-16	●	●	●	●	3 6 10 15 20	M8
SP3B4-16	●	●	●	●	3 6 10 15 20	M8

◇ Note: "●" default, in stock, "-" unavailable

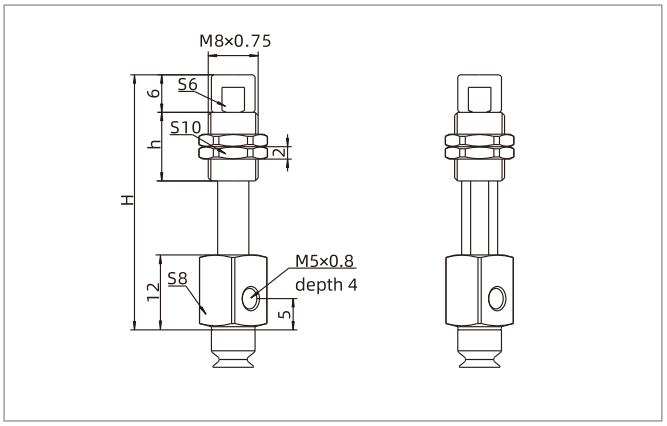
Dimensions(mm) -C type



SP3C4-16 Vertical rotating

SP3C4-16 Vertical non-rotating

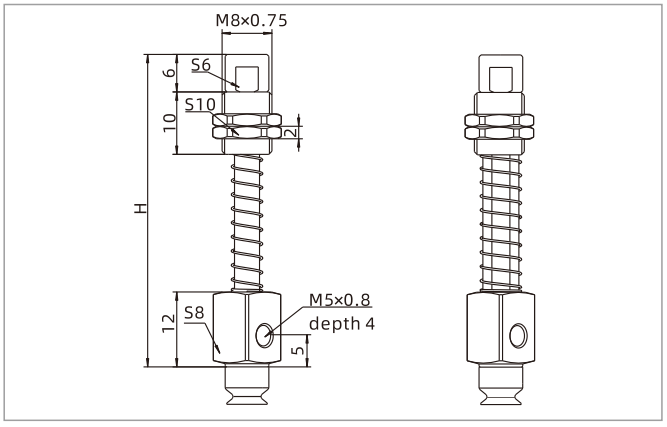
Model/Size	H	Y	Buffer stroke	F1 N	F2 N	F3 N	Weight g
SP3C□-l15-M8	49.0	24.5	15	0.6	1.3	1.9	10.3
SP3C□-l15R-M8	49.0	24.5	15	0.6	1.3	1.8	12.3
SP3C□-l20-M8	56.5	32.0	20	0.7	1.2	1.8	10.9
SP3C□-l20R-M8	56.5	32.0	20	0.8	1.3	1.8	13.4



SP3C4-16 Lateral rotating

SP3C4-16 Lateral non-rotating

Model/Size	H	h	Buffer stroke	F1 N	F2 N	F3 N	Weight g
SP3C□-L3-M8	33.0	11.0	3	0.8	1.0	1.2	12.8
SP3C□-L3R-M8	33.0	11.0	3	0.8	1.0	1.2	12.2
SP3C□-L6-M8	39.5	14.5	6	0.7	1.0	1.2	14.2
SP3C□-L6R-M8	39.5	14.5	6	0.7	1.0	1.2	13.4
SP3C□-L10-M8	49.5	20.5	10	0.6	1.2	1.9	16.6
SP3C□-L10R-M8	49.5	20.5	10	0.6	1.2	1.9	15.4



SP3C4-16 Lateral rotating

SP3C4-16 Lateral non-rotating

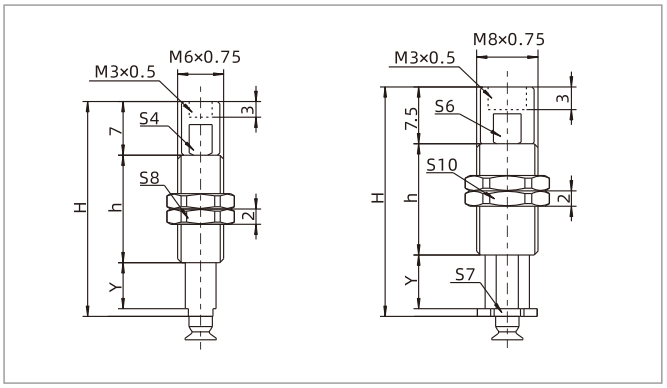
Model/Size	H	Buffer stroke	F1 N	F2 N	F3 N	Weight g
SP3C□-L15-M8	52.5	15	0.6	1.3	1.9	16.3
SP3C□-L15R-M8	52.5	15	0.6	1.3	1.8	15.5
SP3C□-L20-M8	60.0	20	0.7	1.2	1.8	15.1
SP3C□-L20R-M8	60.0	20	0.8	1.3	1.8	16.6

◇ Note: 1. Please refer to page 163 for suction cup selection
2. F1, F2, and F3 represent the elastic force of the buffer support rod at 0 stroke, 50% stroke, and 100% stroke

SP3 Series

Suction Cup with Level Compensator

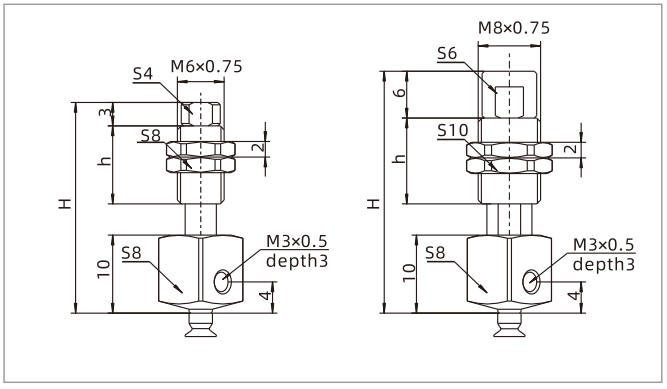
Dimensions(mm) -U type



SP3U1.5-3.5 Vertical rotating

SP3U1.5-3.5 Vertical non-rotating

Model/Size	H	h	Y	Buffer stroke	F1 N	F2 N	F3 N	Weight g
SP3U□-l3-M6	21.0	10.0	3.0	3	0.7	1.0	1.2	3.4
SP3U□-l3R-M8	23.5	11.0	3.0	6	0.8	1.0	1.2	6.8
SP3U□-l6-M6	28.0	14.0	6.0	3	0.8	1.0	1.2	4.4
SP3U□-l6R-M8	30.0	14.5	6.0	6	0.7	1.0	1.2	8.2

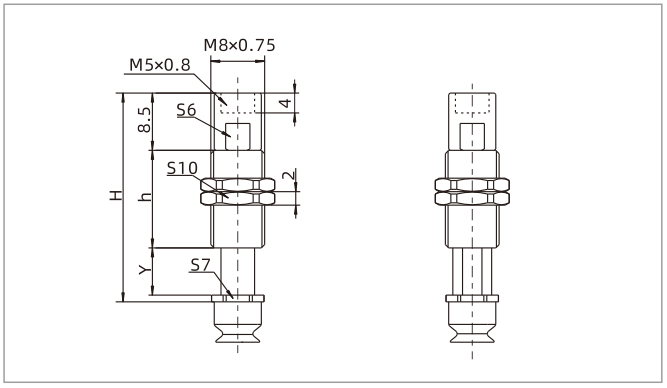


SP3U1.5-3.5 Lateral rotating

SP3U1.5-3.5 Lateral non-rotating

Model/Size	H	h	Buffer stroke	F1 N	F2 N	F3 N	Weight g
SP3U□-L3-M6	27.0	10.0	3	0.7	1.0	1.2	7.7
SP3U□-L3R-M8	31.0	11.0	6	0.8	1.0	1.2	11.0
SP3U□-L6-M6	34.0	14.0	3	0.8	1.0	1.2	8.6
SP3U□-L6R-M8	37.5	14.5	6	0.7	1.0	1.2	12.2

Dimensions(mm) -C type



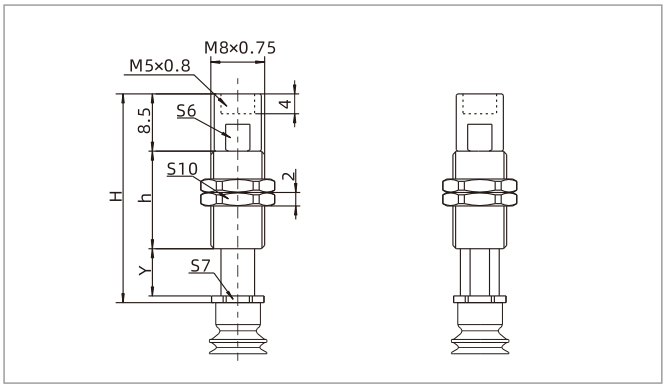
SP3C4-16 Vertical rotating

SP3C4-16 Vertical non-rotating

Model/Size	H	h	Y	Buffer stroke	F1 N	F2 N	F3 N	Weight g
SP3C□-l3-M8	24.5	11.0	4.0	3	0.8	1.0	1.2	7.4
SP3C□-l3R-M8	24.5	11.0	4.0	3	0.8	1.0	1.2	7.3
SP3C□-l6-M8	31.0	14.5	7.0	6	0.7	1.0	1.2	8.6
SP3C□-l6R-M8	31.0	14.5	7.0	6	0.7	1.0	1.2	8.6
SP3C□-l10-M8	41.0	20.5	11.0	10	0.6	1.2	1.9	10.5
SP3C□-l10R-M8	41.0	20.5	11.0	10	0.6	1.2	1.9	10.5

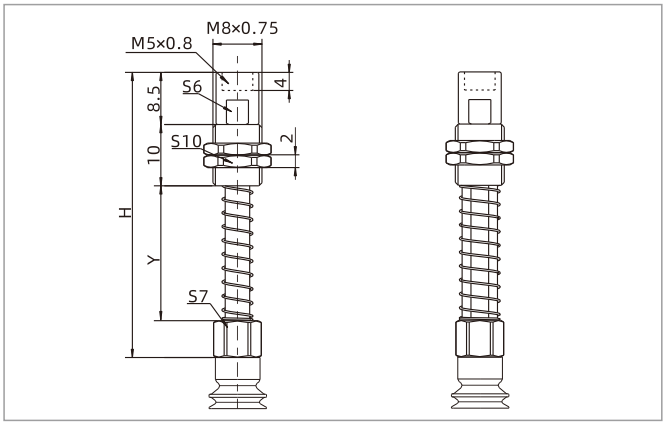
◇ Note: 1. Please refer to page 163 for suction cup selection
2. F1, F2, and F3 represent the elastic force of the buffer support rod at 0 stroke, 50% stroke, and 100% stroke

Dimensions(mm) -B type



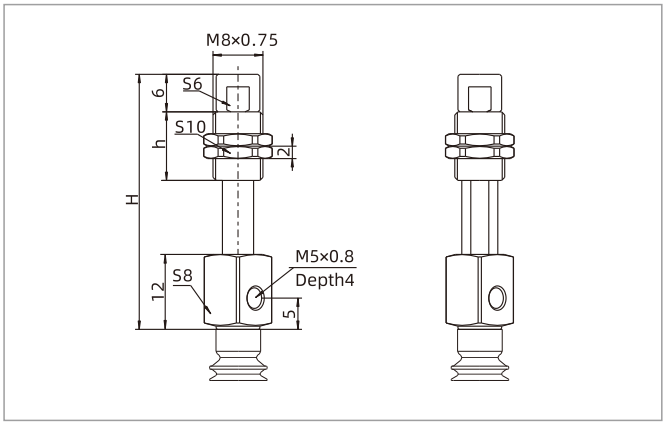
SP3B4-16 Vertical rotating SP3B4-16 Vertical non-rotating

Model/Size	H	h	Y	Buffer stroke	F1 N	F2 N	F3 N	Weight g
SP3B□-I3-M8	24.5	11.0	4	3	0.8	1.0	1.2	7.4
SP3B□-I3R-M8	24.5	11.0	4	3	0.8	1.0	1.2	7.3
SP3B□-I6-M8	31.0	14.5	7	6	0.7	1.0	1.2	8.6
SP3B□-I6R-M8	31.0	14.5	7	6	0.7	1.0	1.2	8.6
SP3B□-I10-M8	41.0	20.5	11	10	0.6	1.2	1.9	10.5
SP3B□-I10R-M8	41.0	20.5	11	10	0.6	1.2	1.9	10.5



SP3B4-16 Vertical rotating SP3B4-16 Vertical non-rotating

Model/Size	H	Y	Buffer stroke	F1 N	F2 N	F3 N	Weight g
SP3B□-I15-M8	49.0	24.5	15	0.6	1.3	1.9	10.3
SP3B□-I15R-M8	49.0	24.5	15	0.6	1.3	1.8	12.3
SP3B□-I20-M8	56.5	32.0	20	0.7	1.2	1.8	10.9
SP3B□-I20R-M8	56.5	32.0	20	0.8	1.3	1.8	13.4



SP3B4-16 Lateral rotating SP3B4-16 Lateral non-rotating

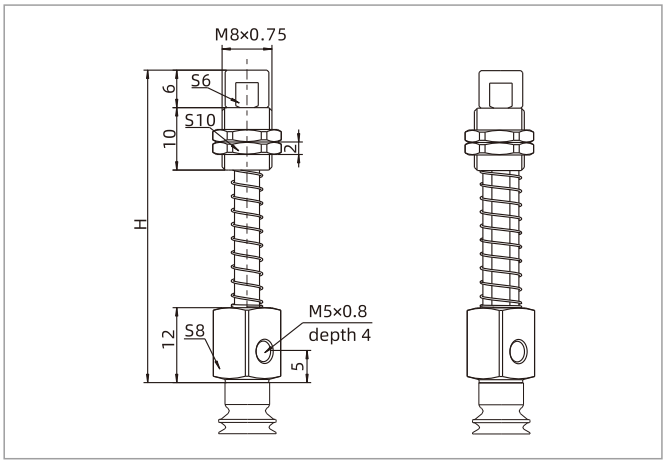
Model/Size	H	h	Buffer stroke	F1 N	F2 N	F3 N	Weight g
SP3B□-L3-M8	33.0	11.0	3	0.8	1.0	1.2	12.8
SP3B□-L3R-M8	33.0	11.0	3	0.8	1.0	1.2	12.2
SP3B□-L6-M8	39.5	14.5	6	0.7	1.0	1.2	14.2
SP3B□-L6R-M8	39.5	14.5	6	0.7	1.0	1.2	13.4
SP3B□-L10-M8	49.5	20.5	10	0.6	1.2	1.9	16.6
SP3B□-L10R-M8	49.5	20.5	10	0.6	1.2	1.9	15.4

◇ Note: 1. Please refer to page 163 for suction cup selection
2. F1, F2, and F3 represent the elastic force of the buffer support rod at 0 stroke, 50% stroke, and 100% stroke

SP3 Series

Suction Cup with Level Compensator

Dimensions(mm) -B type



SP3B4-16 Lateral rotating

SP3B4-16 Lateral non-rotating

Model/Size	H	Buffer stroke	F1 N	F2 N	F3 N	Weight g
SP3B□-L15-M8	52.5	15	0.2	0.5	1.9	16.3
SP3B□-L15R-M8	52.5	15	0.2	0.5	1.8	15.5
SP3B□-L20-M8	59.5	20	0.2	0.5	1.8	15.1
SP3B□-L20R-M8	59.5	20	0.2	0.5	1.8	16.6

◇ Note: 1. Please refer to page 163 for suction cup selection
2. F1, F2, and F3 represent the elastic force of the buffer support rod at 0 stroke, 50% stroke, and 100% stroke

Mounting parts - Level compensator

Model Vertical rotating	Vertical non-rotating	Model Lateral rotating	Lateral non-rotating	Buffer stroke	Applicable suction cup
PSP3-I3ST0.5-M6	PSP3-I3RST0.5-M8	PSP3-L3ST0.5-M6	PSP3-L3RST0.5-M8	3	SP3U1.5, 2, 3.5
PSP3-I6ST0.5-M6	PSP3-I6RST0.5-M8	PSP3-L6ST0.5-M6	PSP3-L6RST0.5-M8	6	
PSP3-I3ST1.5-M8	PSP3-I3RST1.5-M8	PSP3-L3ST1.5-M8	PSP3-L3RST1.5-M8	3	SP3C4, 6, 8; SP3B4, 6, 8
PSP3-I6ST1.5-M8	PSP3-I6RST1.5-M8	PSP3-L6ST1.5-M8	PSP3-L6RST1.5-M8	6	
PSP3-I10ST1.5-M8	PSP3-I10RST1.5-M8	PSP3-L10ST1.5-M8	PSP3-L10RST1.5-M8	10	
PSP3-I15ST1.5-M8	PSP3-I15RST1.5-M8	PSP3-L15ST1.5-M8	PSP3-L15RST1.5-M8	15	
PSP3-I20ST1.5-M8	PSP3-I20RST1.5-M8	PSP3-L20ST1.5-M8	PSP3-L20RST1.5-M8	20	
PSP3-I3ST2-M8	PSP3-I3RST2-M8	PSP3-L3ST2-M8	PSP3-L3RST2-M8	3	SP3C10, 13, 16; SP3B10, 13, 16
PSP3-I6ST2-M8	PSP3-I6RST2-M8	PSP3-L6ST2-M8	PSP3-L6RST2-M8	6	
PSP3-I10ST2-M8	PSP3-I10RST2-M8	PSP3-L10ST2-M8	PSP3-L10RST2-M8	10	
PSP3-I15ST2-M8	PSP3-I15RST2-M8	PSP3-L15ST2-M8	PSP3-L15RST2-M8	15	
PSP3-I20ST2-M8	PSP3-I20RST2-M8	PSP3-L20ST2-M8	PSP3-L20RST2-M8	20	

SFT Series

Thin Lip Flat Suction Cup

PAPER | PLASTIC BAG | GLASS | SOLAR | COMPOSITE MATERIAL | ANTI-DEFORMATION

RoHS

Features

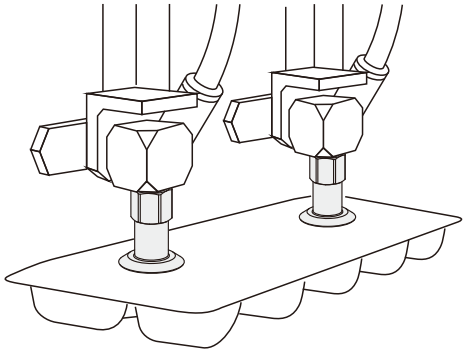
◇ Ultra-thin sealing lip
◇ High temperature and mark free material is optional

Advantages

◇ Suitable for film, paper and solar panels
◇ Prevent the workpiece from being sucked into the suction cup
◇ Suction without mark, can also for high temperature and mark free
◇ Prevent paper and film from wrinkling
◇ High temperature resistance, ozone resistance and UV radiation, suitable for handling in paper and printing industry

Applications

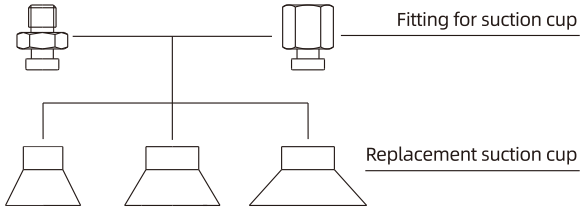
◇ Handling all kinds of packaging materials, such as paper, plastic film, opening plastic bag
◇ Hanlding fragile workpieces, such as thin wooden panels, solar silicon wafers, solar cell



Structure

◇ Suction cup and fitting are split structure design,wearing parts can be replaced separately

In same series, replacement suction cup and fitting can be combined on request.



SFT Series

Thin Lip Flat Suction Cup

How to order

SFT 15 HD - M5M
① ② ③ ④

① Series	② Diameter	③ Material & Hardness		④ Connection thread
SFT	15 - ϕ15mm	WS - White silicone	50	Nil - Suction cup only
	20 - ϕ20mm	HD - High temp/ Mark free material	60	M5M - M5×0.8 male thread
	24 - ϕ24mm	NR - Natural rubber	40	G1M - G1/8 male thread
	30 - ϕ30mm			G2M - G1/4 male thread
	34 - ϕ34mm			G1F - G1/8 female thread
	35 - ϕ35mm			G2F - G1/4 female thread
	40 - ϕ40mm			

Selection

Model	Connection thread M - Male thread		F - Female thread
SFT15□	SFT15□-M5M	SFT15□-G1M	SFT15□-G1F
SFT20□	SFT20□-M5M	SFT20□-G1M	SFT20□-G1F
SFT24□	SFT24□-M5M	SFT24□-G1M	SFT24□-G1F
SFT30□	SFT30□-G2M		SFT30□-G2F
SFT34□	SFT34□-G2M		SFT34□-G2F
SFT35□	SFT35□-G2M		SFT35□-G2F
SFT40□	SFT40□-G2M		SFT40□-G2F

Technical parameters

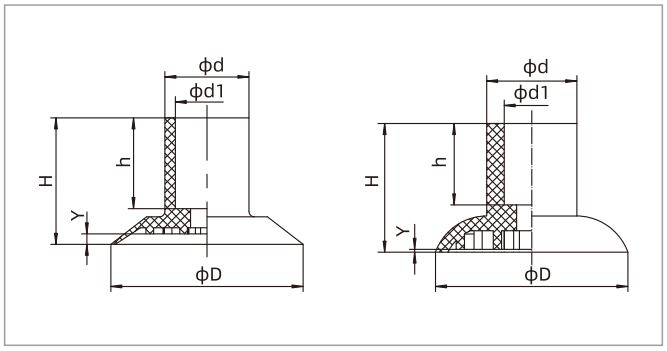
Model	Pull-out force N	Inner volume cm^3	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SFT15	8	0.2	16	0.5	6	10
SFT20	14	0.5	18	0.8	6	5
SFT24	20	0.7	23	1	6	5
SFT30	32	1.3	28	2.7	8	5
SFT34	41	2	33	3.1	8	5
SFT35	43	1.5	19	5.8	8	5
SFT40	56.5	3	39	4.5	8	5

◇ Note:Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces.Recommend the length of vacuum hose to be as short as possible, max 2m.

SFT Series

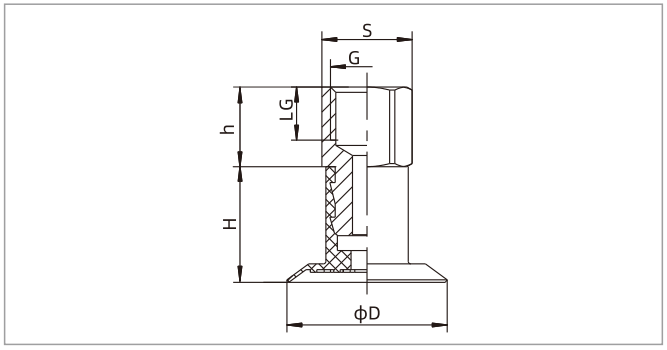
Thin Lip Flat Suction Cup

Dimensions(mm) - Suction cup only



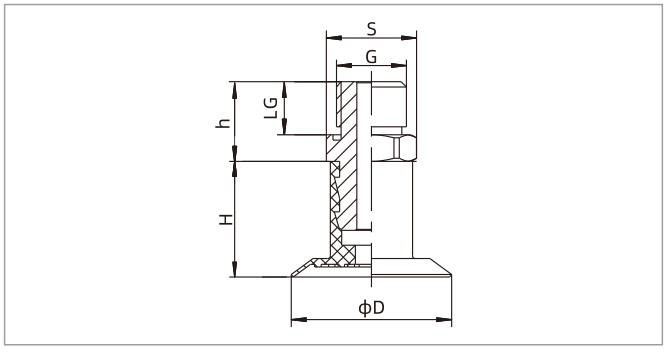
SFT15-40 SFT35

Model/Size	D	H	d	h	d1	Y
SFT15□	14.5	10	9	7.2	4.5	0.9
SFT20□	20.9	10.4	10.5	7.2	4.5	1.5
SFT24□	24.4	10.8	10	7.2	4.5	1.7
SFT30□	30.6	21.8	15.6	15.7	11.2	2
SFT34□	34.5	23	14.8	16.8	11.2	1.4
SFT35□	35	23.5	16.5	14.8	10	0.5
SFT40□	40.5	20.5	16	14.5	8	2.3



SFT - Female thread connection

Model/Size	D	H	h	G	LG	S
SFT15□-G1F	14.5	10	12	G1/8	8	14
SFT20□-G1F	20.9	10.4	12	G1/8	8	14
SFT24□-G1F	24.4	10.8	12	G1/8	8	14
SFT30□-G2F	30.6	21.8	15	G1/4	10	17
SFT34□-G2F	34.5	23	15	G1/4	10	17
SFT35□-G2F	35	23.5	15	G1/4	10	17
SFT40□-G2F	40.5	20.5	15	G1/4	10	17



SFT - Male thread connection

Model/Size	D	H	h	G	LG	S
SFT15□-M5M	14.5	10	10	M5×0.8	5	7
SFT15□-G1M	14.5	10	13.5	G1/8	7.5	14
SFT20□-M5M	20.9	10.4	10	M5×0.8	5	7
SFT20□-G1M	20.9	10.4	13.5	G1/8	7.5	14
SFT24□-M5M	24.4	10.8	10	M5×0.8	5	7
SFT24□-G1M	24.4	10.8	13.5	G1/8	7.5	14
SFT30□-G2M	30.6	21.8	15	G1/4	10	17
SFT34□-G2M	34.5	23	15	G1/4	10	17
SFT35□-G2M	35	23.5	15	G1/4	10	17
SFT40□-G2M	40.5	20.5	15	G1/4	10	17

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model M - Male thread	F - Female thread	Applicable suction cup
Fitting for suction cup	PJS-M5M-SFT24	-	SFT15, 20, 24
	PJS-G1M-SFT24	PJS-G1F-SFT24	SFT15, 20, 24
	PJS-G2M-SFT34	PJS-G2F-SFT34	SFT30, 34
	PJS-G2M-SFT35	PJS-G2F-SFT35	SFT35
	PJS-G2M-SFT40	PJS-G2F-SFT40	SFT40

SFA Series

Ultra-thin Lip Flat Suction Cup Special for Plastic Bags

PLASTIC BAG HIGH SEALING

RoHS

Features

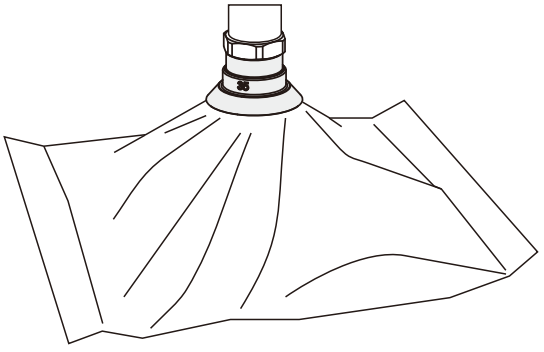
◇ Ultra-thin sealing lip
◇ Support structure at the bottom

Advantages

◇ Suitable for film products, can fit workpiece closely
◇ Prevent the workpiece from being sucked into suction cup and wrinkling
◇ Food grade silicone, suitable for food package

Applications

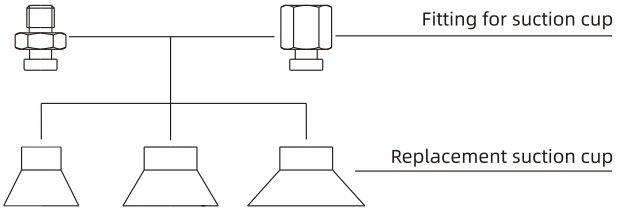
◇ Handling plastic film packaging bag
◇ Open film packaging bag in packaging production line



Structure

◇ Suction cup and fitting are split structure design, wearing parts can be replaced separately

In same series, replacement suction cup and fitting can be combined on request.



SFA Series

Ultra-thin Lip Flat Suction Cup Special for Plastic Bags

How to order

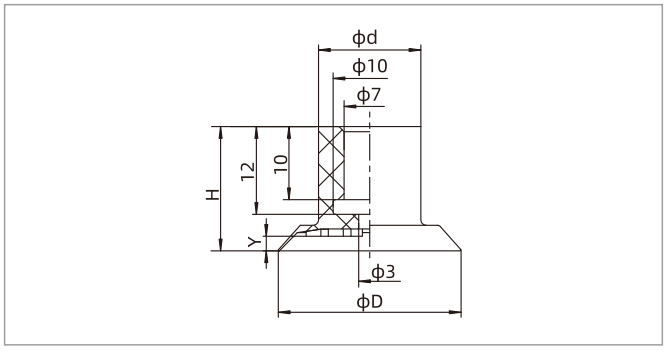
SFA 20 S - M5M
① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread	
SFA	20 - ϕ20mm 25 - ϕ25mm 35 - ϕ35mm 50 - ϕ50mm	S - Silicone 40	Nil - Suction cup only M5M - M5×0.8 male thread G1M - G1/8 male thread G2M - G1/4 male thread G3M - G3/8 male thread	M5F - M5×0.8 female thread M8F - M8×1.25 female thread

Selection

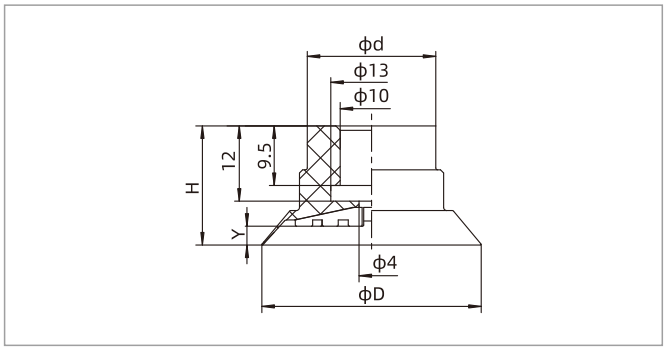
Model	Connection thread M - Male thread		F - Female thread	MPQ pcs
SFA20S	SFA20S-M5M	SFA20S-G1M	SFA20S-M5F	5
SFA25S	SFA25S-M5M	SFA25S-G1M	SFA25S-M5F	5
SFA35S	SFA35S-G2M	SFA35S-G3M	SFA35S-M8F	5
SFA50S	SFA50S-G2M	SFA50S-G3M	SFA50S-M8F	1

Dimensions(mm) - Suction cup only



SFA20-25

Model/Size	D	H	d	Y
SFA20S	20	17	13	1.6
SFA25S	25	17	14	2



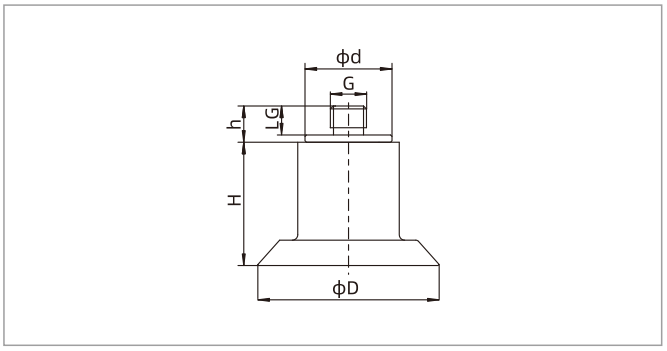
SFA35-50

Model/Size	D	H	d	Y
SFA35S	35	19	20.5	3
SFA50S	50	22	20.5	4.5

SFA Series

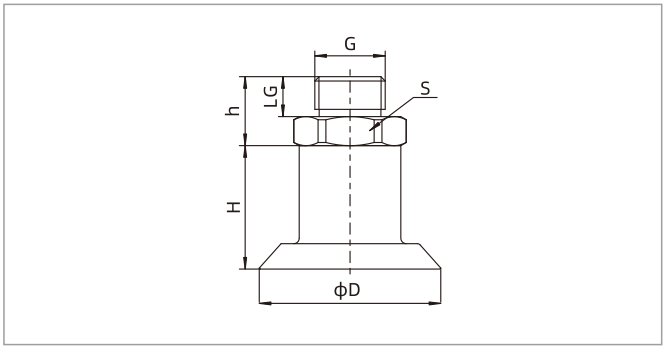
Ultra-thin Lip Flat Suction Cup Special for Plastic Bags

Dimensions(mm) - Suction cup with fitting



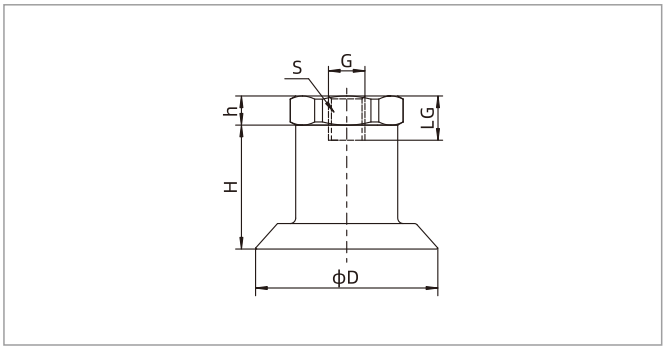
SFA - Male thread connection

Model/Size	D	H	h	G	LG	d
SFA20S-M5M	20	17	5	M5×0.8	4	12
SFA25S-M5M	25	17	5	M5×0.8	4	12



SFA - Male thread connection

Model/Size	D	H	h	G	LG	S
SFA20S-G1M	20	17	9.5	G1/8	5.5	14
SFA25S-G1M	25	17	9.5	G1/8	5.5	14
SFA35S-G2M	35	19	11.5	G1/4	6.5	21
SFA35S-G3M	35	19	11.5	G3/8	6.5	21
SFA50S-G2M	50	22	11.5	G1/4	6.5	21
SFA50S-G3M	50	22	11.5	G3/8	6.5	21



SFA - Female thread connection

Model/Size	D	H	h	G	LG	S
SFA20S-M5F	20	17	4	M5×0.8	5	14
SFA25S-M5F	25	17	4	M5×0.8	5	14
SFA35S-M8F	35	19	6	M8×1.25	8	21
SFA50S-M8F	50	22	6	M8×1.25	8	21

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model M - Male thread	F - Female thread	Applicable suction cup
Fitting for suction cup	PJS-M5M-SFA20	PJS-M5F-SFA20	SFA20,25
	PJS-G1M-SFA20	-	SFA20,25
	PJS-G2M-SFA50	PJS-M8F-SFA50	SFA35,50
	PJS-G3M-SFA50	-	SFA35,50

SOG Series

Oval Concave Suction Cup Special for Cylindrical Objects

CYLINDRICAL OBJECT | BATTERY | SLIPPING RESISTANCE

RoHS

Features

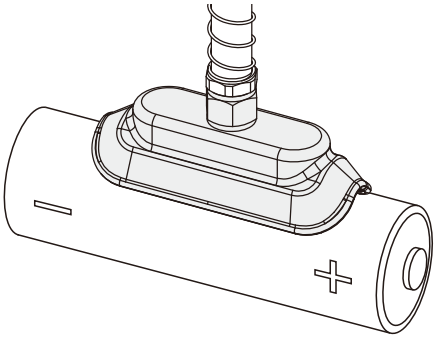
◇ Concave sealing lip structure
◇ Internal groove structure

Advantages

◇ Suitable for handling cylindrical workpiece
◇ Effectively increase the friction force between suction cup and workpiece surface

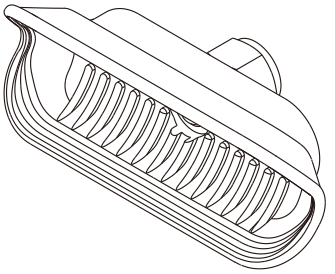
Applications

◇ Suitable for cylindrical workpieces, such as steel pipes, plastic round pipes, lithium batteries, etc
◇ Handling oily round metal pipes



Structure

◇ Concave oval flat structure design



SOG Series

Oval Concave Suction Cup Special for Cylindrical Objects

How to order

SOG 35×100 N - G2F
① ② ③ ④

① Series	② Size	③ Material & Hardness	④ Connection thread
SOG	15×40 35×100	N - NBR 45	M5F - M5×0.8 female thread M5M - M5×0.8 male thread G2F - G1/4 female thread G3F - G3/8 female thread G2M - G1/4 male thread M10M - M10×1.5 male thread M14M - M14×1.5 male thread RA - Rectangular adapter

Selection

Model	Connection thread M5M	G2M	M10M	M14M
SOG15×40N-□	SOG15×40N-M5M	-	-	-
SOG35×100N-□	-	SOG35×100N-G2M	SOG35×100N-M10M	SOG35×100N-M14M

Model	Connection thread M5F	G2F	G3F	RA
SOG15×40N-□	SOG15×40N-M5F	-	-	-
SOG35×100N-□	-	SOG35×100N-G2F	SOG35×100N-G3F	SOG35×100N-RA

Technical parameters

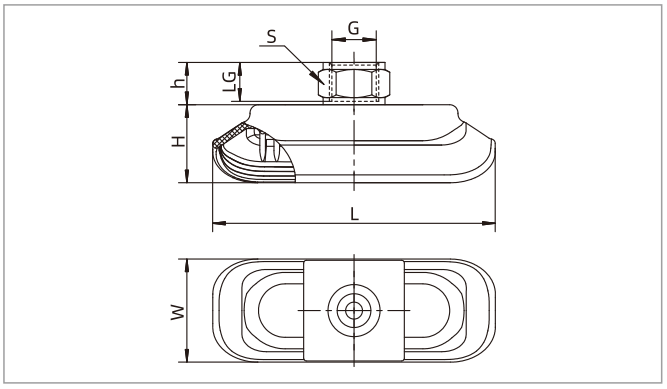
Model	Vertical pull-out force N	Inner volume cm^3	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SOG15×40	22	1.3	8	17	6	5
SOG35×100	122	11	25	23	8	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces.

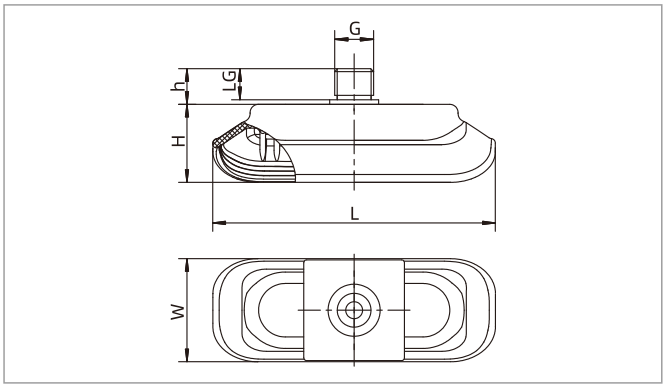
SOG Series

Oval Concave Suction Cup Special for Cylindrical Objects

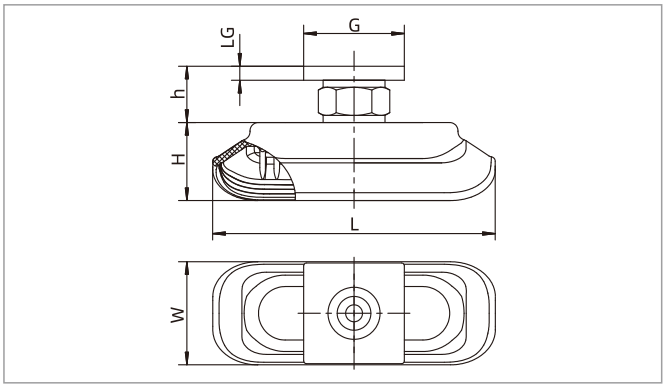
Dimensions(mm)



F - Female thread connection



M - Male thread connection



RA - Rectangular adapter

Model/Size	L	W	H	G	LG	h	S
SOG15×40N-M5F	42	15.5	14	M5×0.8	-	-	-
SOG15×40N-M5M	42	15.5	14	M5×0.8	5	6.5	8
SOG35×100N-G2F	100.5	36.5	28	G1/4	11	14	17
SOG35×100N-G3F	100.5	36.5	28	G3/8	11	14	22
SOG35×100N-G2M	100.5	36.5	28	G1/4	9	11	5
SOG35×100N-M10M	100.5	36.5	28	M10×1.5	12	13.5	5
SOG35×100N-M14M	100.5	36.5	28	M14×1.5	12	13.5	5
SOG35×100N-RA	100.5	36.5	28	31.8×31.8	4.7	18.7	-

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

SPA Series

Thin Lip Flat Suction Cup

PAPER ANTI-DEFORMATION

RoHS

Features

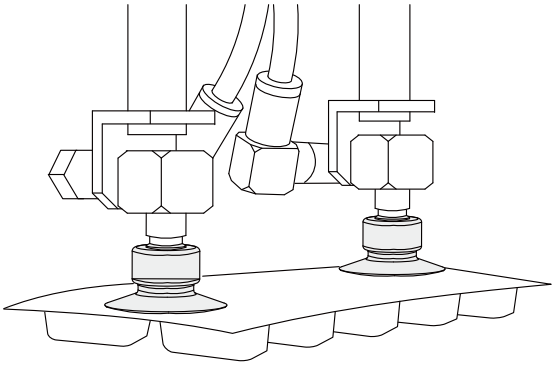
◇ Thin lip, flat and short stroke
◇ With support structure at the bottom
◇ Available in various sizes

Advantages

◇ Good sealing for handling of thin and flat workpieces
◇ Prevents fold during handling of paper and thin film
◇ Suitable for workpieces of various sizes and shapes

Applications

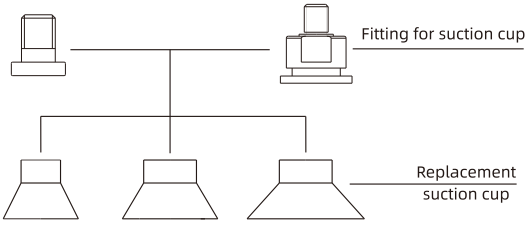
◇ Suitable for occasions that has high requirements for mark on product surface during handling, such as paper, plastic film, aluminum foil and copper foil
◇ B type suction cup is flat and with thin lip, which is more suitable for handling thin workpieces that are easy to wrinkle, such as aluminum foil, copper foil



Structure

◇ Split structure for easy replacement of wearing parts

In the same series, replacement suction cup and fitting can be combined as required



SPA Series

Thin Lip Flat Suction Cup

How to order

SPA 15 A N - M5M

① ② ③ ④ ⑤

① Series	② Diameter	③ Stroke	④ Material & Hardness	⑤ Connection thread
SPA	10 - ϕ10mm 15 - ϕ15mm 20 - ϕ20mm 30 - ϕ30mm 40 - ϕ40mm 50 - ϕ50mm	A B D	N - NBR 50 WS - White silicone 50 CN - Conductive NBR 55 CS - Conductive silicone 55	Nil - Suction cup only M5M - M5×0.8 male thread M6M - M6×1 male thread M8M - M8×1 male thread

Selection

Model	Connection thread M - Male thread
SPA10A□	SPA10A□-M5M
SPA10B□	SPA10B□-M5M
SPA15A□	SPA15A□-M5M
SPA15B□	SPA15B□-M5M
SPA15D□	SPA15D□-M5M
SPA20A□	SPA20A□-M5M

Model	Connection thread M - Male thread	
SPA20B□	SPA20B□-M5M	
SPA25A□	SPA25A□-M6M	SPA25A□-M8M
SPA30A□	SPA30A□-M6M	SPA30A□-M8M
SPA30B□	SPA30B□-M5M	
SPA40A□	SPA40A□-M6M	SPA40A□-M8M
SPA50A□	SPA50A□-M6M	SPA50A□-M8M

Technical parameters

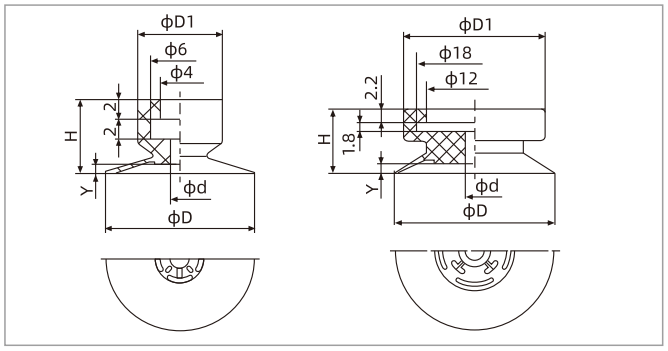
Model	Pull-out force N	Inner volume cm^3	Weight g	Recommended hose dia. mm	MPQ pcs
SPA10A	3.5	<0.1	0.3	4	10
SPA10B	3.5	<0.1	0.56	4	10
SPA15A	8	<0.1	0.28	4	10
SPA15B	8	<0.1	0.4	4	10
SPA15D	8	<0.1	0.28	4	10
SPA20A	15	0.3	0.8	4	5
SPA20B	15	<0.1	0.7	4	5
SPA25A	22	0.6	2.0	4	5
SPA30A	32	1.1	2.6	4	5
SPA30B	32	0.2	3.4	4	5
SPA40A	56	2.6	2.6	6	5
SPA50A	88	5.8	4.3	6	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces.Recommend the length of vacuum hose to be as short as possible, max 2m.

SPA Series

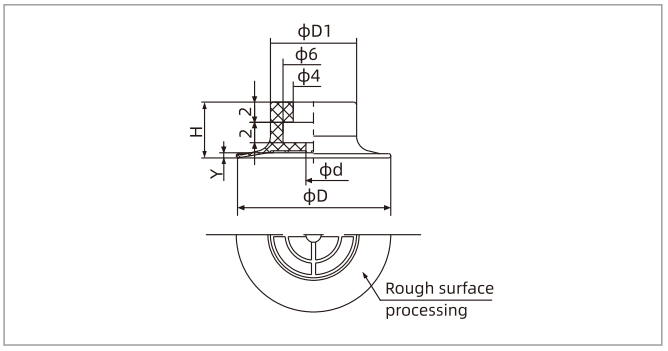
Thin Lip Flat Suction Cup

Dimensions(mm) - Suction cup only



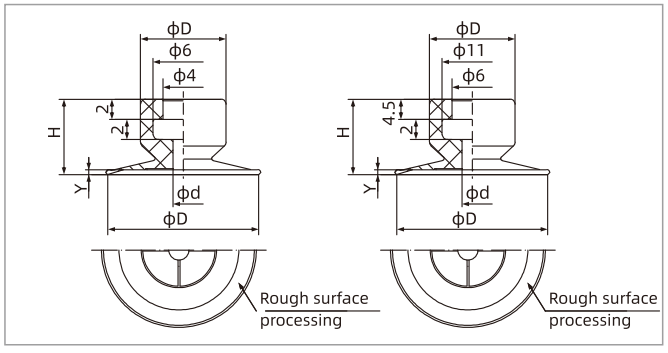
SPA10A-20A SPA25A-50A

Model/Size	D	D1	H	d	Y
SPA10A□	10	8.5	7.5	2	0.6
SPA15A□	15	8.5	7.5	2	0.9
SPA20A□	20	9	10	2	1.2
SPA25A□	25	22	10	3	1.5
SPA30A□	30	22	10	3	1.8
SPA40A□	40	22	10	3	2.4
SPA50A□	50	22	10	3	3



SPA15D

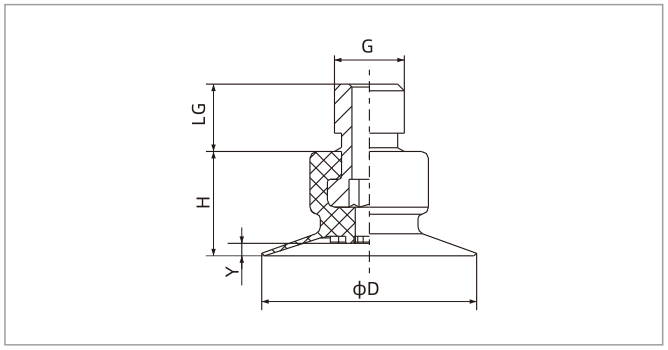
Model/Size	D	D1	H	d	Y
SPA15D□	15	8.5	5.5	1.5	0.5



SPA10B-20B SPA30B

Model/Size	D	D1	H	d	Y
SPA10B□	10	8.5	7.5	2	0.3
SPA15B□	15	8.5	7.5	2	0.5
SPA20B□	20	8.5	10	2	0.8
SPA30B□	30	15	11	3	0.3

Dimensions(mm) - Suction cup with fitting



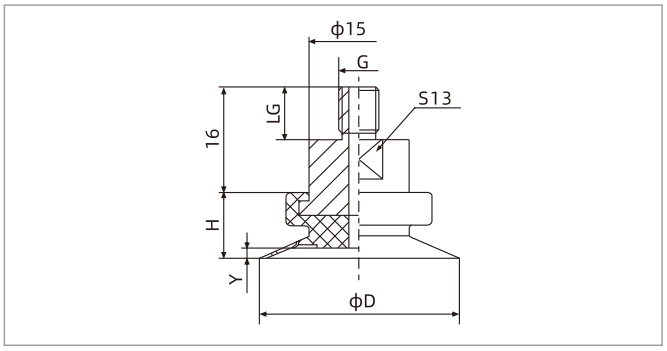
SPA10-30 Male thread connection

Model/Size	D	H	G	LG	Y
SPA10A□-M5M	10	7.5	M5×0.8	5	0.6
SPA10B□-M5M	10	7.5	M5×0.8	5	0.3
SPA15A□-M5M	15	7.5	M5×0.8	5	0.9
SPA15B□-M5M	15	7.5	M5×0.8	5	0.5
SPA15D□-M5M	15	5.5	M5×0.8	5	0.5
SPA20A□-M5M	20	10	M5×0.8	5	1.2
SPA20B□-M5M	20	10	M5×0.8	5	0.8
SPA30B□-M5M	30	11	M5×0.8	5	0.3

SPA Series

Thin Lip Flat Suction Cup

Dimensions(mm) - Suction cup with fitting



Model/size	D	H	G	LG	Y
SPA25A□-M6M	25	10	M6×1	8	1.5
SPA25A□-M8M	25	10	M8×1.25	8	1.5
SPA30A□-M6M	30	10	M6×1	8	1.8
SPA30A□-M8M	30	10	M8×1.25	8	1.8
SPA40A□-M6M	40	10	M6×1	8	2.4
SPA40A□-M8M	40	10	M8×1.25	8	2.4
SPA50A□-M6M	50	10	M6×1	8	3
SPA50A□-M8M	50	10	M8×1.25	8	3

SPA25A-50A

◇ Note: The dimensional tolerance conforms to the GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model M - Male thread	Applicable suction cup
Fitting for suction cup	PJS-M5M-ST2	SPA10A, 10B, 15A, 15B, 15D, 20A, 20B
	PJS-M5M-ST3	SPA30B
	PJS-M6M-ST7	SPA25A, 30A, 40A, 50A
	PJS-M8M-ST7	SPA25A, 30A, 40A, 50A

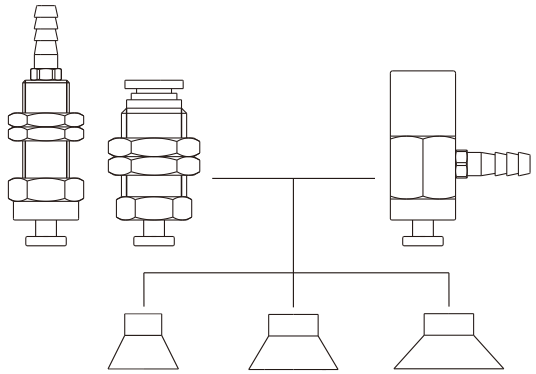
SPA Series

Suction Cup with Locking Fitting

Structure

◇ Consisting of replacement suction cup and locking fitting
◇ Plug-in fitting for suction cup
◇ Vertical vacuum port, Pagoda fitting or one-touch fitting for connection,male thread for mounting
◇ Lateral vacuum port, Pagoda fitting for connection, female thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SPA10AN - L B6 - M4F
① ② ③ ④

① Model	② Vacuum port direction	③ Vacuum port connection	④ Mounting thread
SPA10AN	Nil - Vertical direction	A4 - One-touch fitting ϕ4 hose	M4F - M4×0.7 female thread
	L - Lateral direction	A6 - One-touch fitting ϕ6 hose	M6F - M6×1 female thread
		B6 - Pagoda fitting ϕ6 hose	M8M - M8×1 male thread
			M10M - M10×1 male thread
			M12M - M12×1 male thread
			M14M - M14×1 male thread

◇ Please refer to page 294 for suction cup selection

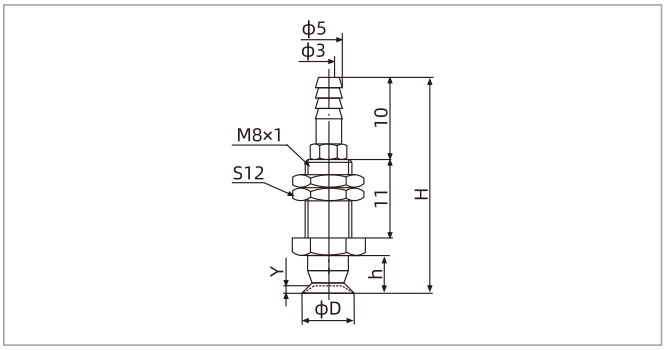
Selection

Model	Vacuum port direction Vertical-Pagoda fitting	Vertical-One-touch fitting	Lateral-Pagoda fitting
SPA10A□	SPA10A□-B6-M8M	SPA10A□-A4-M12M	SPA10A□-LB6-M4F
SPA10B□	SPA10B□-B6-M8M	SPA10B□-A4-M12M	SPA10B□-LB6-M4F
SPA15A□	SPA15A□-B6-M8M	SPA15A□-A4-M12M	SPA15A□-LB6-M4F
SPA15B□	SPA15B□-B6-M8M	SPA15B□-A4-M12M	SPA15B□-LB6-M4F
SPA15D□	SPA15D□-B6-M8M	SPA15D□-A4-M12M	SPA15D□-LB6-M4F
SPA20A□	SPA20A□-B6-M8M	SPA20A□-A4-M12M	SPA20A□-LB6-M4F
SPA20B□	SPA20B□-B6-M8M	SPA20B□-A4-M12M	SPA20B□-LB6-M4F
SPA25A□	SPA25A□-B6-M10M	SPA25A□-A6-M14M	SPA25A□-LB6-M6F
SPA30A□	SPA30A□-B6-M10M	SPA30A□-A6-M14M	SPA30A□-LB6-M6F
SPA30B□	SPA30B□-B6-M10M	SPA30B□-A6-M14M	SPA30B□-LB6-M6F
SPA40A□	SPA40A□-B6-M10M	SPA40A□-A6-M14M	SPA40A□-LB6-M6F
SPA50A□	SPA50A□-B6-M10M	SPA50A□-A6-M14M	SPA50A□-LB6-M6F

SPA Series

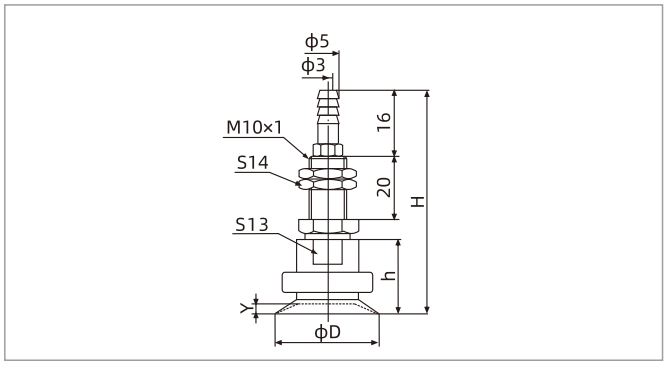
Suction Cup with Locking Fitting

Dimensions(mm)



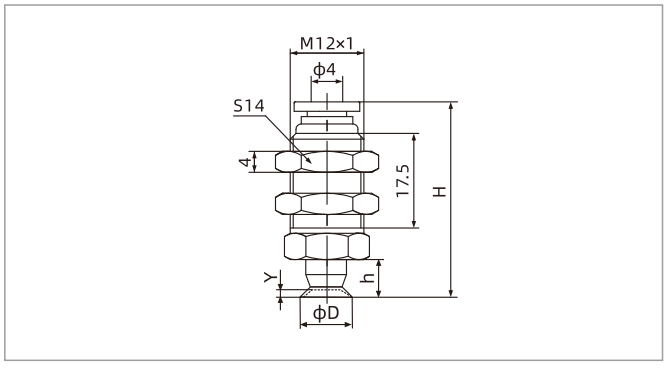
SPA10-20 Vertical-Pagoda fitting

Model/Size	D	H	h	Y
SPA10A□-B6-M8M	10	31.5	7.5	0.6
SPA10B□-B6-M8M	10	31.5	7.5	0.3
SPA15A□-B6-M8M	15	31.5	7.5	0.9
SPA15B□-B6-M8M	15	31.5	7.5	0.5
SPA15D□-B6-M8M	15	29.5	5.5	0.5
SPA20A□-B6-M8M	20	34	10	12
SPA20B□-B6-M8M	20	34	10	0.8



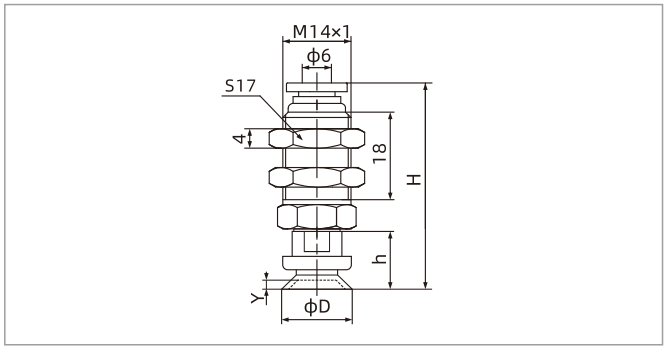
SPA25-50 Vertical-Pagoda fitting

Model/Size	D	H	h	Y
SPA25A□-B6-M10M	25	66	18	1.5
SPA30A□-B6-M10M	30	66	18	1.8
SPA30B□-B6-M10M	30	59	11	1.5
SPA40A□-B6-M10M	40	66	18	2.4
SPA50A□-B6-M10M	50	66	18	3



SPA10-20 Vertical-One-touch fitting

Model/Size	D	H	h	Y
SPA10A□-A4-M12M	10	35	7.5	0.6
SPA10B□-A4-M12M	10	35	7.5	0.3
SPA15A□-A4-M12M	15	35	7.5	0.9
SPA15B□-A4-M12M	15	35	7.5	0.5
SPA15D□-A4-M12M	15	33	5.5	0.5
SPA20A□-A4-M12M	20	37.5	10	12
SPA20B□-A4-M12M	20	37.5	10	0.8



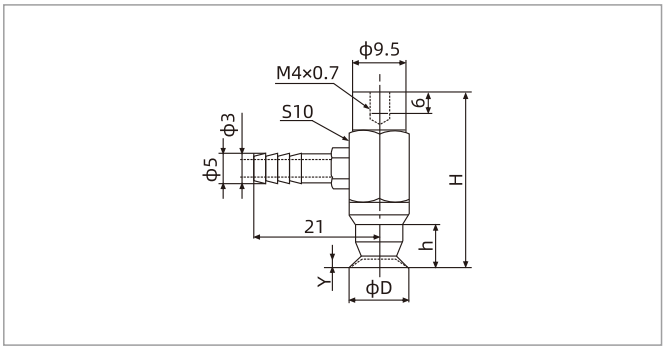
SPA25-50 Vertical-One-touch fitting

Model/Size	D	H	h	Y
SPA25A□-A6-M14M	25	48	18	1.5
SPA30A□-A6-M14M	30	48	18	1.8
SPA30B□-A6-M14M	30	40	11	1.5
SPA40A□-A6-M14M	40	48	18	2.4
SPA50A□-A6-M14M	50	48	18	3

SPA Series

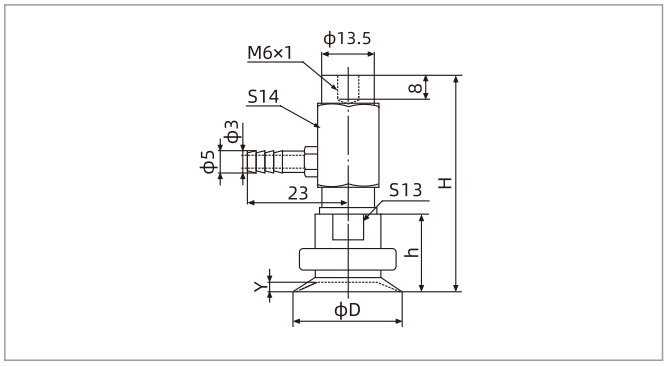
Suction Cup with Locking Fitting

Dimensions(mm)



SPA10-20 Lateral-Pagoda fitting

Model/Size	D	H	h	Y
SPA10A□-LB6-M4F	10	30	7.5	0.6
SPA10B□-LB6-M4F	10	30	7.5	0.3
SPA15A□-LB6-M4F	15	30	7.5	0.9
SPA15B□-LB6-M4F	15	30	7.5	0.5
SPA15D□-LB6-M4F	15	28	5.5	0.5
SPA20A□-LB6-M4F	20	32.5	10	12
SPA20B□-LB6-M4F	20	32.5	10	0.8



SPA25-50 Lateral-Pagoda fitting

Model/Size	D	H	h	Y
SPA25A□-LB6-M6F	25	51.5	18	1.5
SPA30A□-LB6-M6F	30	51.5	18	1.8
SPA30B□-LB6-M6F	30	44.5	11	1.5
SPA40A□-LB6-M6F	40	51.5	18	2.4
SPA50A□-LB6-M6F	50	51.5	18	3

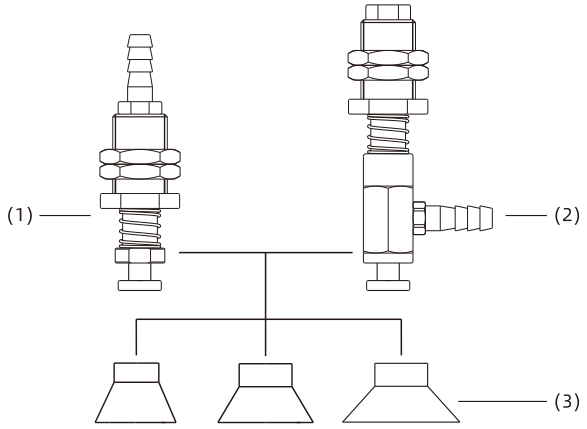
SPA Series

Suction Cup with Level Compensator

Structure

◇ Consisting of replacement suction cup(3) and level compensator
◇ Plug-in fitting for suction cup
◇ Vertical vacuum port(1), male thread for mounting
◇ Lateral vacuum port(2), male thread for mounting

In the same series, replacement suction cup and level compensator can be combined as required



How to order

SPA10AN - F E 10 LB6 - M11
① ② ③ ④ ⑤ ⑥

① Model	② Level compensator type	③ Buffer type	④ Buffer stroke	⑤ Vacuum port connection	⑥ Mounting thread
SPA10AN	F - PSPF Series	E - External spring	4 6	B6 - Vertical, pagoda fitting ϕ6 hose	M11 - M11×1
			10 15	LB6 - Lateral, pagoda fitting ϕ6 hose	M14 - M14×1

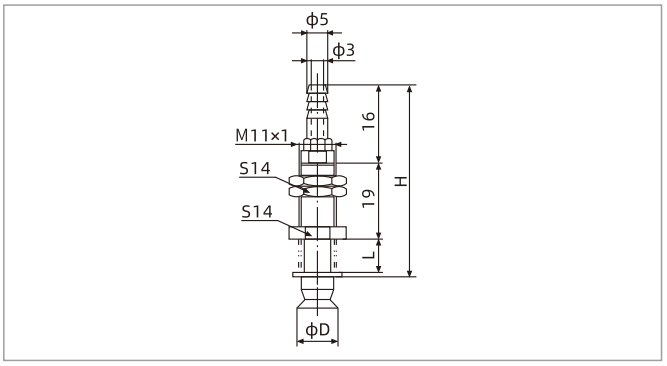
Selection

Model	Vacuum port direction Vertical - Pagoda fitting		Lateral - Pagoda fitting	
SPA10A□	SPA10A□-FE4B6-M11	SPA10A□-FE10B6-M11	SPA10A□-FE4LB6-M11	SPA10A□-FE10LB6-M11
SPA10B□	SPA10B□-FE4B6-M11	SPA10B□-FE10B6-M11	SPA10B□-FE4LB6-M11	SPA10B□-FE10LB6-M11
SPA15A□	SPA15A□-FE4B6-M11	SPA15A□-FE10B6-M11	SPA15A□-FE4LB6-M11	SPA15A□-FE10LB6-M11
SPA15B□	SPA15B□-FE4B6-M11	SPA15B□-FE10B6-M11	SPA15B□-FE4LB6-M11	SPA15B□-FE10LB6-M11
SPA15D□	SPA15D□-FE4B6-M11	SPA15D□-FE10B6-M11	SPA15D□-FE4LB6-M11	SPA15D□-FE10LB6-M11
SPA20A□	SPA20A□-FE4B6-M11	SPA20A□-FE10B6-M11	SPA20A□-FE4LB6-M11	SPA20A□-FE10LB6-M11
SPA20B□	SPA20B□-FE4B6-M11	SPA20B□-FE10B6-M11	SPA20B□-FE4LB6-M11	SPA20B□-FE10LB6-M11
SPA25A□	SPA25A□-FE6B6-M14	SPA25A□-FE15B6-M14	SPA25A□-FE6LB6-M14	SPA25A□-FE15LB6-M14
SPA30A□	SPA30A□-FE6B6-M14	SPA30A□-FE15B6-M14	SPA30A□-FE6LB6-M14	SPA30A□-FE15LB6-M14
SPA30B□	SPA30B□-FE6B6-M14	SPA30B□-FE15B6-M14	SPA30B□-FE6LB6-M14	SPA30B□-FE15LB6-M14
SPA40A□	SPA40A□-FE6B6-M14	SPA40A□-FE15B6-M14	SPA40A□-FE6LB6-M14	SPA40A□-FE15LB6-M14
SPA50A□	SPA50A□-FE6B6-M14	SPA50A□-FE15B6-M14	SPA50A□-FE6LB6-M14	SPA50A□-FE15LB6-M14

SPA Series

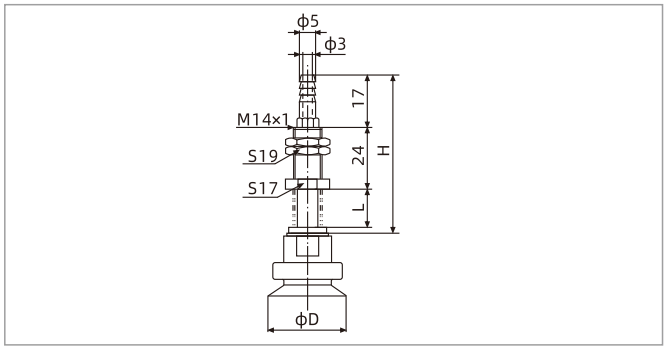
Suction Cup with Level Compensator

Dimensions(mm)



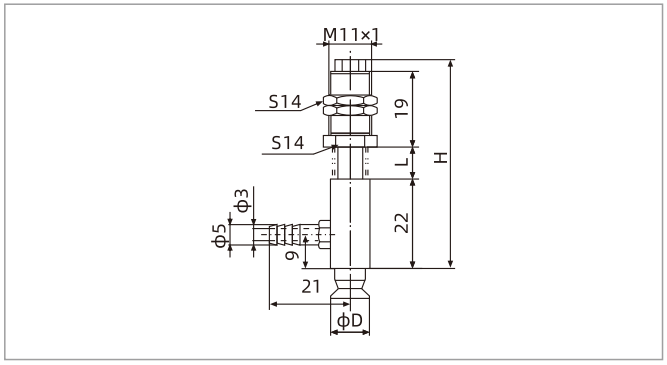
SPA10-20 Vertical-Pagoda fitting

Model/Size	D	H	L	Buffer stroke
SPA10□□-FE4B6-M11	10	46	8	4
SPA10□□-FE10B6-M11	10	58	20	10
SPA15□□-FE4B6-M11	15	46	8	4
SPA15□□-FE10B6-M11	15	58	20	10
SPA20□□-FE4B6-M11	20	46	8	4
SPA20□□-FE10B6-M11	20	58	20	10



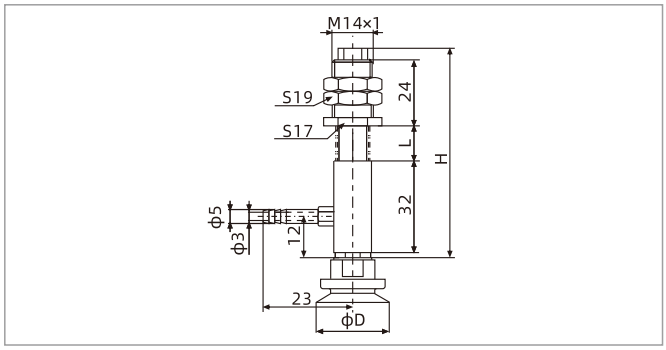
SPA25-50 Vertical-Pagoda fitting

Model/Size	D	H	L	Buffer stroke
SPA25□□-FE6B6-M14	25	57	13	6
SPA25□□-FE15B6-M14	25	74	30	15
SPA30□□-FE6B6-M14	30	57	13	6
SPA30□□-FE15B6-M14	30	74	30	15
SPA40□□-FE6B6-M14	40	57	13	6
SPA40□□-FE15B6-M14	40	74	30	15
SPA50□□-FE6B6-M14	50	57	13	6
SPA50□□-FE15B6-M14	50	74	30	15



SPA10-20 Lateral-Pagoda fitting

Model/Size	D	H	L	Buffer stroke
SPA10□□-FE4LB6-M11	10	52	8	4
SPA10□□-FE10LB6-M11	10	64	20	10
SPA15□□-FE4LB6-M11	15	52	8	4
SPA15□□-FE10LB6-M11	15	64	20	10
SPA20□□-FE4LB6-M11	20	52	8	4
SPA20□□-FE10LB6-M11	20	64	20	10



SPA25-50 Lateral-Pagoda fitting

Model/Size	D	H	L	Buffer stroke
SPA25□□-FE6LB6-M14	25	73	13	6
SPA25□□-FE15LB6-M14	25	90	30	15
SPA30□□-FE6LB6-M14	30	73	13	6
SPA30□□-FE15LB6-M14	30	90	30	15
SPA40□□-FE6LB6-M14	40	73	13	6
SPA40□□-FE15LB6-M14	40	90	30	15
SPA50□□-FE6LB6-M14	50	73	13	6
SPA50□□-FE15LB6-M14	50	90	30	15

SPC Series

Bellows Suction Cup

PACKAGING PLASTIC ELECTRONICS

RoHS

Features

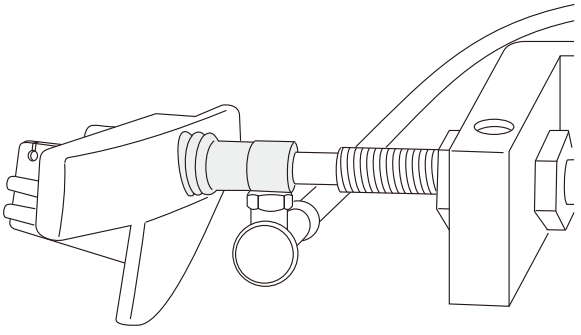
◇ 2.5 bellows
◇ Soft and tapered lips
◇ Available in various sizes

Advantages

◇ Large suction force, and have good buffer effect when suck workpiece with uneven surface
◇ Good sealing and long compressed stroke, suitable for handling workpieces with uneven surface
◇ Suitable for workpieces of various sizes and shapes

Applications

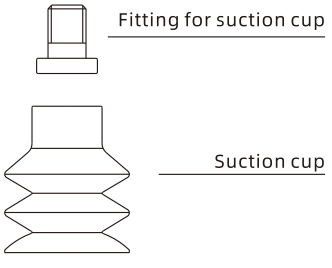
◇ Handling of fragile workpieces such as electronic components and injection molding parts
◇ Handling of workpieces with uneven surface such as paper and pipes



Structure

◇ 2.5 bellows, long compressed stroke
◇ Split structure for easy replacement of wearing parts

In the same series, suction cup and fitting can be combined as required



SPC Series

Bellows Suction Cup

How to order

SPC 15 N - M5M

① ② ③ ④

① Series	② Diameter		③ Material & Hardness		④ Connection thread
SPC	3 - ϕ3mm	20 - ϕ20mm	N - NBR	55	Nil - Suction cup only
	5 - ϕ5mm	25 - ϕ25mm	WS - White silicone	50	M5M - M5×0.8 male thread
	7 - ϕ7mm	30 - ϕ30mm	CN - Conductive NBR	•55	M8M - M8×1.25 male thread
	10 - ϕ10mm	40 - ϕ40mm	CS - Conductive silicone	•55	G1M - G1/8 male thread
	12 - ϕ12mm	60 - ϕ60mm			M3M - M3×0.5 male thread
	15 - ϕ15mm	90 - ϕ90mm			
	18 - ϕ18mm				

Selection

Model	Connection thread M - Male thread
SPC3□	SPC3□-M3M
SPC5□	SPC5□-M5M
SPC7□	SPC7□-M5M
SPC10□	SPC10□-M5M
SPC12□	SPC12□-M5M
SPC15□	SPC15□-M5M
SPC18□	SPC18□-M5M

Model	Connection thread M - Male thread
SPC20□	SPC20□-M5M
SPC25□	SPC25□-M5M
SPC30□	SPC30□-M8M
SPC40□	SPC40□-M8M
SPC60□	SPC60□-M8M
SPC90□	SPC90□-G1M

◇ Note: CN and CS material are not available for cup diameter 60mm and 90mm.

Technical parameters

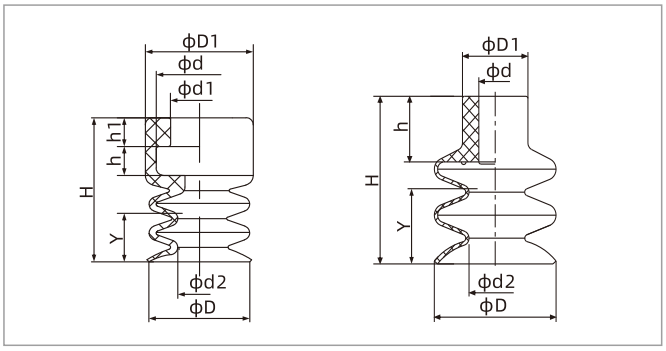
Model	Pull-out force N	Inner volume cm^3	Min. Curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SPC3	0.5	<0.1	4	0.2	4	10
SPC5	0.9	<0.1	7.5	0.2	4	10
SPC7	1.7	<0.1	12	0.3	4	10
SPC10	3.5	0.2	13	0.8	6	10
SPC12	5	0.4	13	1.3	6	10
SPC15	8	0.9	15	1.7	6	10
SPC18	11.5	1.5	20	1.8	6	10
SPC20	14	2	27	2.8	6	5
SPC25	22	5	30	4	6	5
SPC30	32	8.3	35	10.5	6	5
SPC40	56	16.5	60	22.5	8	5
SPC60	127	52	75	52.4	8	1
SPC90	286	135	85	152.8	8	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces.Recommend the length of vacuum hose to be as short as possible, max 2m.

SPC Series

Bellows Suction Cup

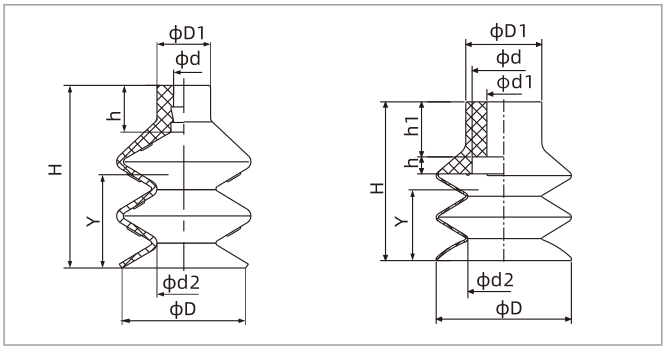
Dimensions(mm) - Suction cup only



SPC3-7

SPC10-20

Model/Size	D	H	D1	d	h	d1	h1	d2	Y
SPC3□	3	6	4	3	1	2	1.5	1.2	2.5
SPC5□	5	9.5	7.5	6	2	4	2	2	4
SPC7□	7	10	7.5	6	2	4	2	3	5
SPC10□	9	15	9	5	7	-	-	4	6
SPC15□	15.2	22.8	10	5	9	-	-	6	13.8
SPC18□	18.6	23	10	5	9	-	-	8	14
SPC20□	20.6	23	10	5	9	-	-	9.5	14

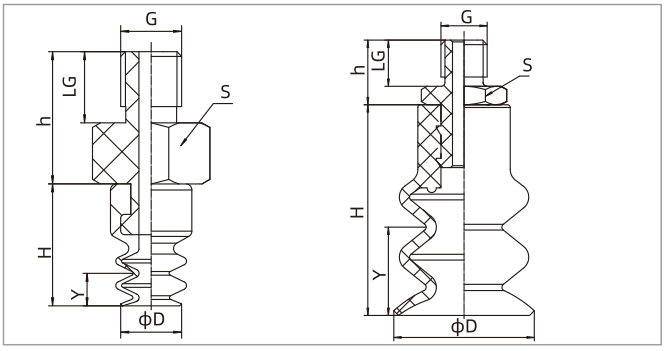


SPC12 SPC25

SPC30-90

Model/Size	D	H	D1	d	h	d1	h1	d2	Y
SPC12□	13	21.6	10	3.8	8.5	-	-	5	9
SPC25□	24	34	10	3.8	8.5	-	-	10	25.5
SPC30□	32	37.5	18	15	4	8	13	17	20.5
SPC40□	42	46	20	15	4	8	13	16	29
SPC60□	62	55	21.5	15	5	8	13	29	37
SPC90□	88	87.5	25	25	6	12	20	32	61.5

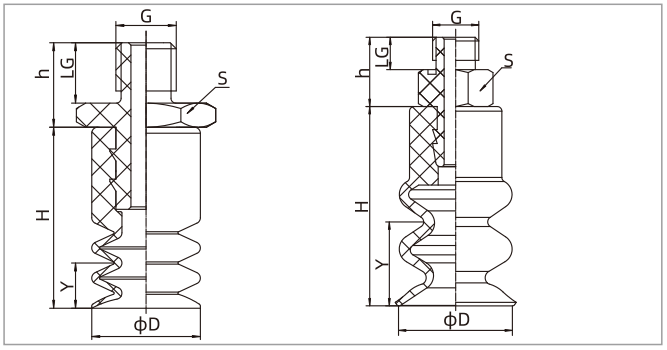
Dimensions(mm) - Suction cup with fitting



SPC3

SPC15-20

Model/Size	D	H	G	LG	h	s	Y
SPC3□-M3M	3	6	M3×0.5	3.5	6.5	5	2.5
SPC15□-M5M	15.2	22.8	M5×0.8	5	7	8	13.8
SPC18□-M5M	18.6	23	M5×0.8	5	7	8	14
SPC20□-M5M	20.6	23	M5×0.8	5	7	8	14



SPC10

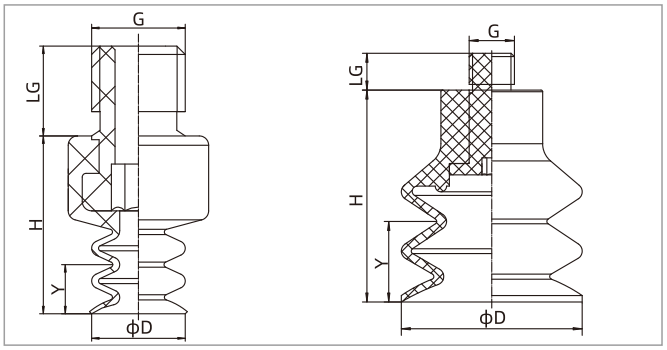
SPC12-25

Model/Size	D	H	G	LG	h	S	Y
SPC10□-M5M	10	15	M5×0.8	5	7	10	6
SPC12□-M5M	13	21.6	M5×0.8	3.5	7.5	7	9
SPC25□-M5M	24	34	M5×0.8	3.5	7.5	7	25.5

SPC Series

Bellows Suction Cup

Dimensions(mm) - Suction cup with fitting



SPC5-7 SPC30-60

◇ Note: The dimensional tolerance conforms to GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

Model/Size	D	H	G	LG	Y
SPC5□-M5M	5	9.5	M5×0.8	5	4
SPC7□-M5M	7	10	M5×0.8	5	5
SPC30□-M8M	32	37.5	M8×1.25	6.5	20.5
SPC40□-M8M	42	46	M8×1.25	6.5	29
SPC60□-M8M	62	55	M8×1.25	6.5	37
SPC90□-G1M	88	87.5	G1/8	7	61.5

Mounting parts

Item	Model M - Male thread	Applicable suction cup
Fitting for suction cup	PJS-M3M-ST1	SPC3
	PJS-M5M-ST2	SPC5, 7
	PJS-M5M-SPC10	SPC10
	PJS-M5M-SPC15	SPC15, 18, 20
	PJS-M5M-SC3	SPC12, 25
	PJS-M8M-ST5	SPC30, 40, 60
	PJS-G1M-ST8	SPC90

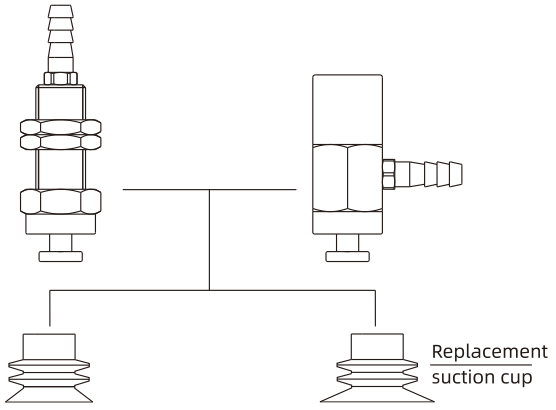
SPC Series

Suction Cup with Locking Fitting

Structure

◇ Consisting of replacement suction cup and locking fitting
◇ Plug-in fitting for suction cups of diameter 5mm-25mm
◇ Fitting with hexagon socket mounting hole for suction cups of diameter 30mm-60mm
◇ Vertical vacuum port, pagoda fitting for connection, male thread for mounting
◇ Lateral vacuum port, pagoda fitting for connection, female thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SPC10N - L B6 - M4F
① ② ③ ④

① Model	② Vacuum port direction	③ Vacuum port connection	④ Mounting thread
SPC10N	Nil - Vertical direction L - Lateral direction	B6 - Pagoda fitting ϕ6 hose	M4F - M4×0.7 female thread M6F - M6×1 female thread M8M - M8×1 male thread M10M - M10×1 male thread

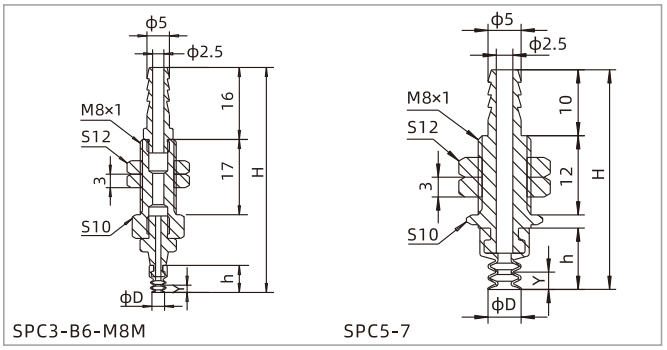
◇ Please refer to page 317 for suction cup selection

Selection

Model	Vacuum port direction Vertical-Pagoda fitting	Lateral-Pagoda fitting
SPC3□	SPC3□-B6-M8M	SPC3□-LB6-M4F
SPC5□	SPC5□-B6-M8M	SPC5□-LB6-M4F
SPC7□	SPC7□-B6-M8M	SPC7□-LB6-M4F
SPC10□	SPC10□-B6-M8M	SPC10□-LB6-M4F
SPC12□	SPC12□-B6-M8M	SPC12□-LB6-M4F
SPC15□	SPC15□-B6-M8M	SPC15□-LB6-M4F
SPC18□	SPC18□-B6-M8M	SPC18□-LB6-M4F
SPC20□	SPC20□-B6-M8M	SPC20□-LB6-M4F
SPC25□	SPC25□-B6-M8M	SPC25□-LB6-M4F
SPC30□	SPC30□-B6-M10M	SPC30□-LB6-M6F
SPC40□	SPC40□-B6-M10M	SPC40□-LB6-M6F
SPC60□	SPC60□-B6-M10M	SPC60□-LB6-M6F

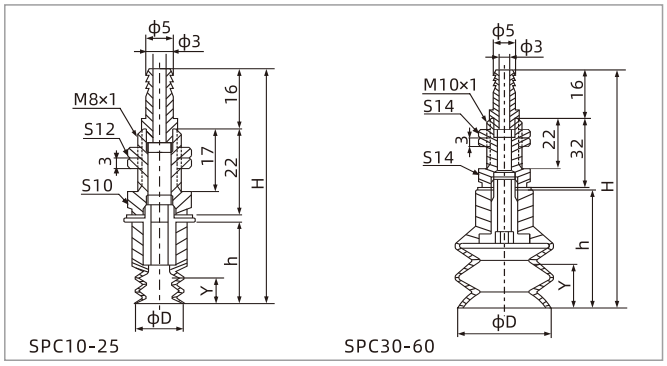
SPC Series

Suction Cup with Locking Fitting



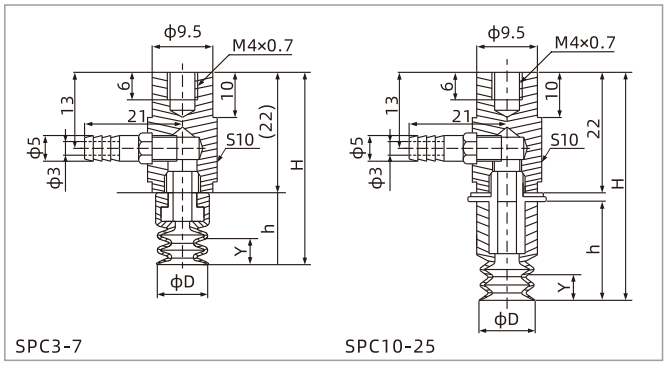
Vertical-Pagoda fitting

Model/Size	D	H	h	Y
SPC3□-B6-M8M	3	50	6	2.5
SPC5□-B6-M8M	5	33.5	9.5	4
SPC7□-B6-M8M	7	34	10	5
SPC10□-B6-M8M	10	55	15	6
SPC12□-B6-M8M	13	63.6	21.6	9
SPC15□-B6-M8M	15.2	62.8	22.8	13.8
SPC18□-B6-M8M	18.6	63	23	14
SPC20□-B6-M8M	20.6	63	23	14
SPC25□-B6-M8M	24	76	34	25.5



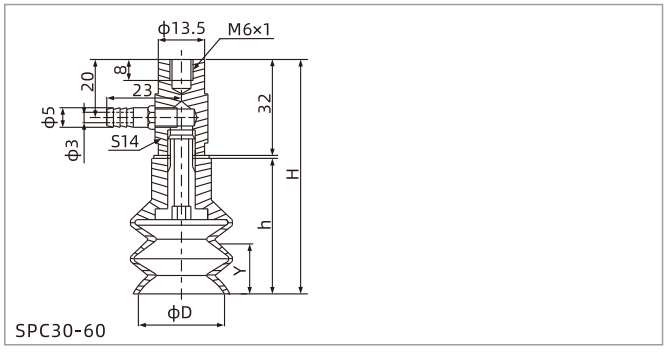
Vertical-Pagoda fitting

Model/Size	D	H	h	Y
SPC30□-B6-M10M	32	85.5	37.5	30.5
SPC40□-B6-M10M	42	94	46	29
SPC60□-B6-M10M	62	103	55	37



Lateral-Pagoda fitting

Model/Size	D	H	h	Y
SPC3□-LB6-M4F	3	28	6	2.5
SPC5□-LB6-M4F	5	31.5	9.5	4
SPC7□-LB6-M4F	7	32	10	5
SPC10□-LB6-M4F	10	39	15	6
SPC12□-LB6-M4F	13	47.6	21.6	9
SPC15□-LB6-M4F	15.2	46.8	22.8	13.8
SPC18□-LB6-M4F	18.6	47	23	14
SPC20□-LB6-M4F	20.6	47	23	14
SPC25□-LB6-M4F	24	60	34	25.5



Lateral-Pagoda fitting

Model/Size	D	H	h	Y
SPC30□-LB6-M6F	32	69.5	37.5	20.5
SPC40□-LB6-M6F	42	78	46	29
SPC60□-LB6-M6F	62	87	55	37

◇ Note: The dimensional tolerance conforms to GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

SPJ Series

Bellows Suction Cup

PACKAGING PLASTIC

RoHS

Features

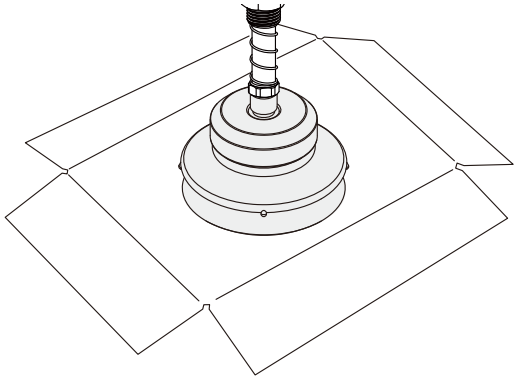
◇ 1.5 bellows
◇ Soft and tapered lips
◇ Mark free plug optional
◇ Available in various sizes

Advantages

◇ Compensate the height difference and good buffer when have contact with workpieces
◇ Good sealing for handling of workpieces with uneven surface
◇ Available in various sizes

Applications

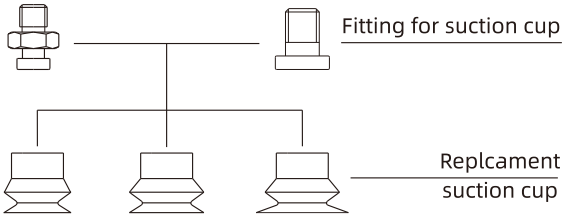
◇ Handling workpieces with uneven surface such as cartons, paper board and sheet, workpieces with curved surface
◇ Handling fragile workpieces such as electronic components and injection molding parts
◇ Suction cup with mark free plug is suitable for handling sensitive electronic material or display screen. It is suitable for occasions with high requirements for mark on adsorption surface



Structure

◇ 1.5 bellows, long compressed stroke
◇ Suction cups wtih diameter less than 50mm adopt split structure for easy replacement
◇ One-piece structure for suction cup wtih diameter 60mm-80mm

In the same series, replacement suction cup and fitting can be combined as required



SPJ Series

Bellows Suction Cup

How to order

SPJ 15 N - M5M - PK
① ② ③ ④ ⑤

① Series	② Diameter		③ Material & Hardness		④ Connection thread	⑤ Plug
SPJ	4 - ϕ4mm	30 - ϕ30mm	N - NBR	55	Nil - Suction cup only	Nil - Without Mark free plug
	6 - ϕ6mm	35 - ϕ35mm	WS - White silicone	50	M3M - M3×0.5 male thread	PK - With mark free plug
	8 - ϕ8mm	40 - ϕ40mm	CN - Conductive NBR	•55	M5M - M5×0.8 male thread	
	10 - ϕ10mm	50 - ϕ50mm	CS - Conductive silicone	•55	M8M - M8×1.25 male thread	
	15 - ϕ15mm	60 - ϕ60mm	HP - Mark free rubber	55	M10F - M10×1.25 female thread	
	20 - ϕ20mm	70 - ϕ70mm				
	25 - ϕ25mm	80 - ϕ80mm				

◇ Note: HP material is not for all sizes. Please contact AIRBEST if need

Selection

Model	Connection thread M - Male thread	Model	Connection thread M - Male thread	Connection thread F - Female thread
SPJ4□	SPJ4□-M3M	SPJ30□ SPJ30□-PK	SPJ30□-M5M SPJ30□-M5M-PK	-
SPJ6□	SPJ6□-M5M	SPJ35□ SPJ35□-PK	SPJ35□-M5M SPJ35□-M5M-PK	-
SPJ8□ SPJ8□-PK	SPJ8□-M5M SPJ8□-M5M-PK	SPJ40□ SPJ40□-PK	SPJ40□-M5M SPJ40□-M5M-PK	-
SPJ10□ SPJ10□-PK	SPJ10□-M5M SPJ10□-M5M-PK	SPJ50□ SPJ50□-PK	SPJ50□-M8M SPJ50□-M8M-PK	-
SPJ15□ SPJ15□-PK	SPJ15□-M5M SPJ15□-M5M-PK	SPJ60□	-	SPJ60□-M10F
SPJ20□ SPJ20□-PK	SPJ20□-M5M SPJ20□-M5M-PK	SPJ70□	-	SPJ70□-M10F
SPJ25□ SPJ25□-PK	SPJ25□-M5M SPJ25□-M5M-PK	SPJ80□	-	SPJ80□-M10F

Technical parameters

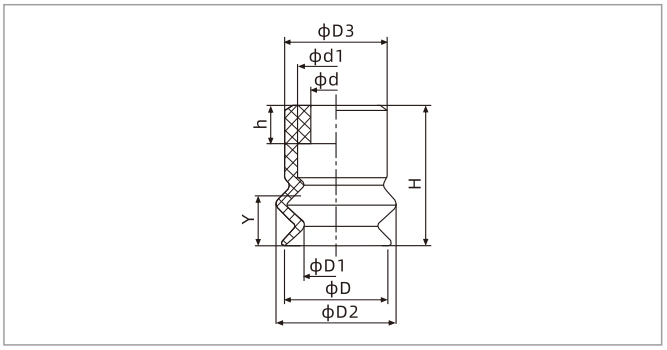
Model	Pull-out force N	Inner volume cm^3	Min. Curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SPJ4	0.6	<0.1	4	0.1	4	10
SPJ6	1.2	<0.1	6	0.2	4	10
SPJ8	2.2	<0.1	8	0.3	4	10
SPJ10	3.5	0.2	12	0.8	4	10
SPJ15	8	0.5	20	1.0	6	10
SPJ20	15	1.1	27	1.8	6	5
SPJ25	24	2.2	40	3.0	6	5
SPJ30	32	3	55	5.3	6	5
SPJ35	43	4.5	65	8.0	6	5
SPJ40	60	6	80	10.5	6	1
SPJ50	92	11.7	95	21.0	8	1
SPJ60	127	20	125	35.6	8	1
SPJ70	173	30	150	52.5	8	1
SPJ80	226	40	140	63.0	8	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor.
The data may be different according to different workpiece surfaces.Recommend the length of vacuum hose to be as short as possible, max 2m.

SPJ Series

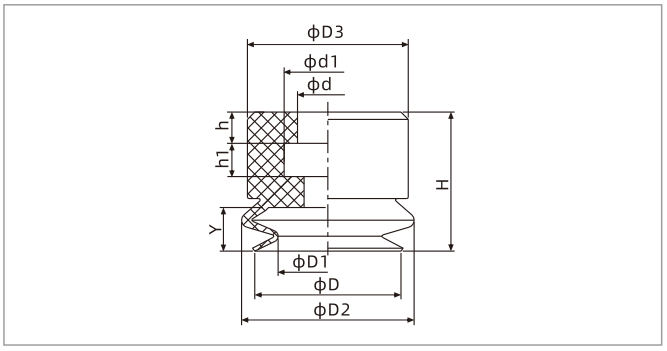
Bellows Suction Cup

Dimensions(mm) - Suction cup only



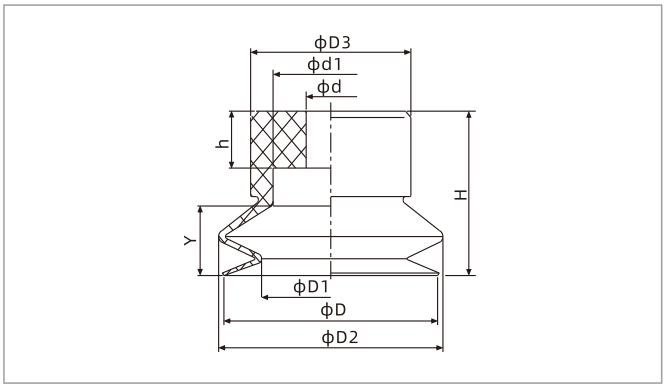
SPJ4-8

Model/Size	D	H	D1	D2	D3	d	h	d1	Y
SPJ4□	4	5.5	2.5	4.6	4	2	1.5	3	2.3
SPJ6□	6	9	3.3	7.8	7.5	4	2	6	4.2
SPJ8□	8	9	5.3	9.8	8	4	2	6	4



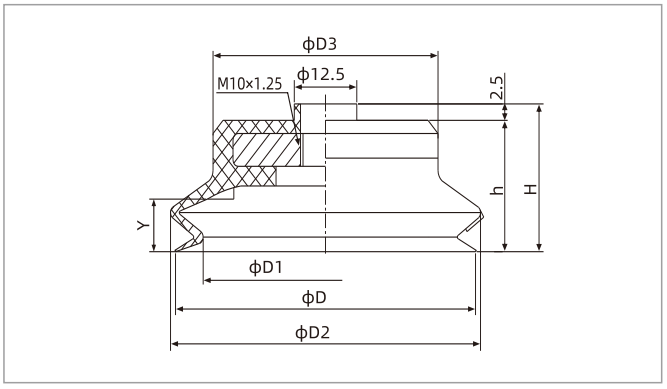
SPJ10-15

Model/Size	D	H	D1	D2	D3	d	h	d1	h1	Y
SPJ10□	10	9.5	6.8	11.8	11	4	2	6	2	3
SPJ15□	15	11	9.7	15.8	12	4	2	6	2	3.3



SPJ20-50

Model/Size	D	H	D1	D2	D3	d	h	d1	Y
SPJ20□	20	13	13	21	15	4.6	4.5	10.8	5.5
SPJ25□	25	15.5	14.5	26	17.5	4.6	4.5	10.8	6.5
SPJ30□	30	18	16	31	20	5.8	7	10.8	7
SPJ35□	35	18	20.5	36	25	5.8	7	10.8	7
SPJ40□	40	18	25	40	30	5.8	7	10.8	7.2
SPJ50□	50	20	32	53	40	7.8	7	19.8	9



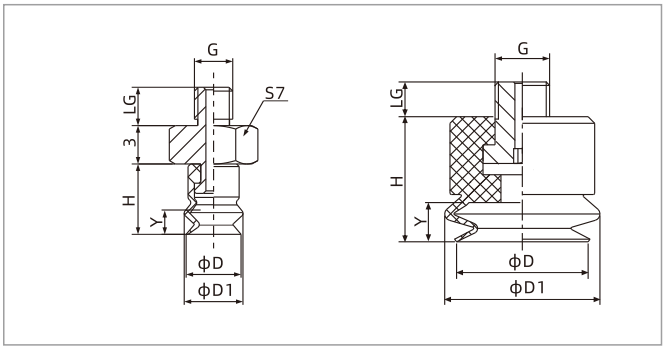
SPJ60-80

Model/Size	D	H	h	D1	D2	D3	Y
SPJ60□-M10F	60	22.5	20	45	62	45	8
SPJ70□-M10F	70	23.5	21	52	74	55	9.5
SPJ80□-M10F	80	23.5	21	61	82	68	9.5

SPJ Series

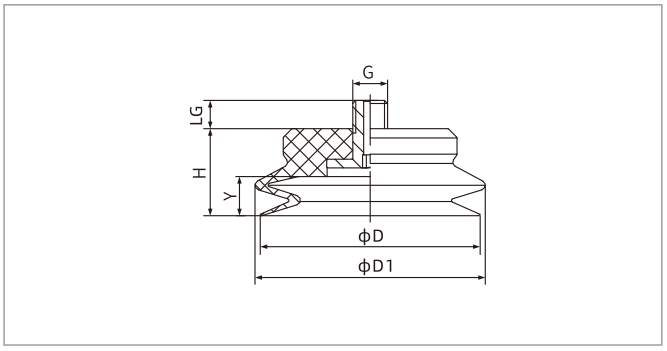
Bellows Suction Cup

Dimensions(mm)



SPJ4 SPJ6-15

Model/Size	D	H	D1	G	LG	Y
SPJ4□-M3M	4	5.5	4.6	M3×0.5	3.5	2.3
SPJ6□-M5M	6	9	7.8	M5×0.8	4.5	4.2
SPJ8□-M5M	8	9	9.8	M5×0.8	4.5	4
SPJ10□-M5M	10	9.5	11.8	M5×0.8	4.5	3
SPJ15□-M5M	15	11	15.8	M5×0.8	4.5	3.3



SPJ20-50

Model/Size	D	H	D1	G	LG	Y
SPJ20□-M5M	20	13	21	M5×0.8	5	5.5
SPJ25□-M5M	25	15.5	26	M5×0.8	5	6.5
SPJ30□-M5M	30	18	31	M5×0.8	5	7
SPJ35□-M5M	35	18	36	M5×0.8	5	7
SPJ40□-M5M	40	18	40	M5×0.8	5	7.2
SPJ50□-M8M	50	20	53	M8×1.25	6.5	9

◇ Note: The dimensional tolerance conforms to GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model M - Male thread	Applicable suction cup
Fitting for suction cup	PJS-M3M-ST1	SPJ4
	PJS-M5M-ST2	SPJ6, 8, 10, 15
	PJS-M5M-ST3	SPJ20, 25
	PJS-M5M-ST4	SPJ30, 35, 40
	PJS-M8M-ST6	SPJ50

SPJ Series

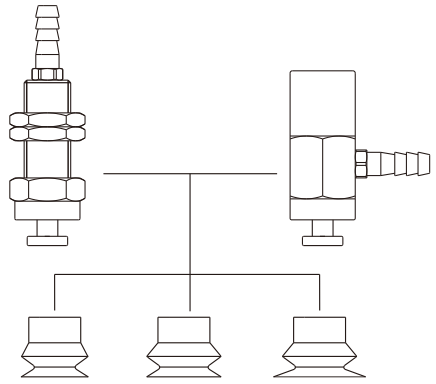
Suction Cup with Locking Fitting

AIRBEST

Structure

◇ Consisting of replacement suction cup and locking fitting
◇ Plug-in fitting for suction cups
◇ Vertical vacuum port, pagoda fitting or one-touch fitting for connection, male thread for mounting
◇ Lateral vacuum port, pagoda fitting for connection, female thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SPJ10N - L B6 - M4F
① ② ③ ④

① Series	② Vacuum port direction	③ Vacuum port connection	④ Mounting thread	
SPJ10N	Nil - Vertical	B6 - Pagoda fitting ϕ6 hose	M4F - M4×0.7 female thread	M8M - M8×1 male thread
	L - Lateral	R1 - Rc1/8 female thread	M6F - M6×1 female thread	M10M - M10×1 male thread
			M8F - M8×1.25 female thread	M16M - M16×1.5 male thread

◇ Please refer to page 323 for suction cup selection

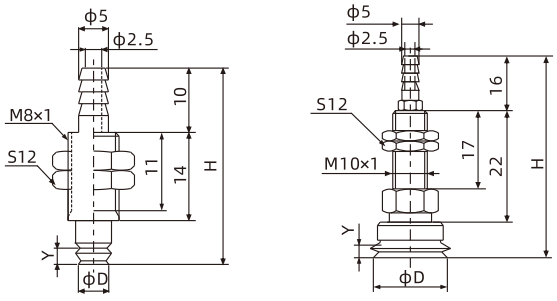
Selection

Model	Vacuum port direction Vertical-Pagoda fitting	Lateral-Pagoda fitting
SPJ6□	SPJ6□-B6-M8M	SPJ6□-LB6-M4F
SPJ8□	SPJ8□-B6-M8M	SPJ8□-LB6-M4F
SPJ10□	SPJ10□-B6-M8M	SPJ10□-LB6-M4F
SPJ15□	SPJ15□-B6-M8M	SPJ15□-LB6-M4F
SPJ20□	SPJ20□-B6-M8M	SPJ20□-LB6-M4F
SPJ25□	SPJ25□-B6-M10M	SPJ25□-LB6-M6F
SPJ30□	SPJ30□-B6-M10M	SPJ30□-LB6-M6F
SPJ35□	SPJ35□ -B6-M10M	SPJ35□ -LB6-M6F
SPJ40□	SPJ40□-B6-M10M	SPJ40□-LB6-M6F
SPJ50□	SPJ50□-B6-M10M	SPJ50□-LB6-M6F
SPJ60□	SPJ60□-R1-M16M	SPJ60□-LR1-M8F
SPJ70□	SPJ70□-R1-M16M	SPJ70□-LR1-M8F
SPJ80□	SPJ80□-R1-M16M	SPJ80□-LR1-M8F

SPJ Series

Suction Cup with Locking Fitting

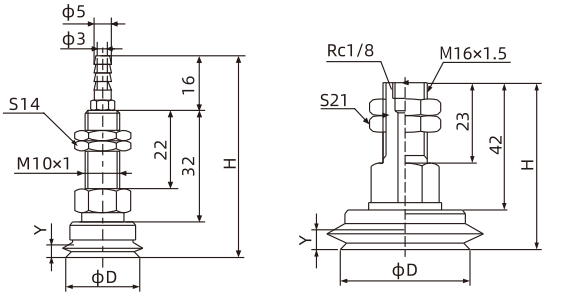
Dimensions(mm)



SPJ6-8 SPJ10-20

Vertical-Pagoda fitting

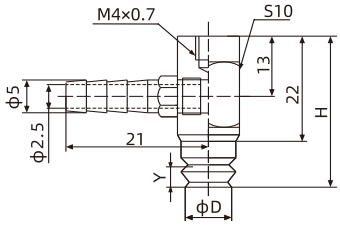
Model/Size	D	H	Y
SPJ6□-B6-M8M	6	33	4.2
SPJ8□-B6-M8M	8	33	4
SPJ10□-B6-M8M	10	47.5	3
SPJ15□-B6-M8M	15	49	3.3
SPJ20□-B6-M8M	20	51	5.5



SPJ25-50 SPJ60-80

Vertical-Pagoda fitting Vertical-Female thread connection

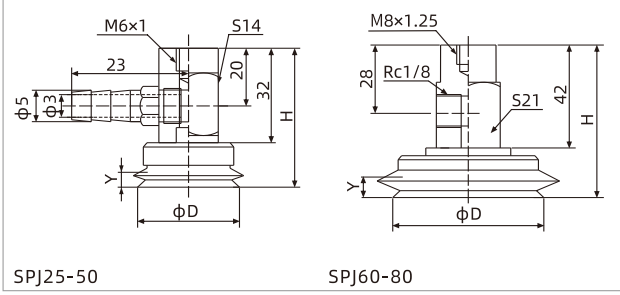
Model/Size	D	H	Y
SPJ25□-B6-M10M	25	63.5	6.5
SPJ30□-B6-M10M	30	66	7
SPJ35□-B6-M10M	35	66	7
SPJ40□-B6-M10M	40	66	7.2
SPJ50□-B6-M10M	50	68	9
SPJ60□-R1-M16M	60	62	8
SPJ70□-R1-M16M	70	63	9.5
SPJ80□-R1-M16M	80	63	9.5



SPJ6-20

Lateral-Pagoda fitting

Model/Size	D	H	Y
SPJ6□-LB6-M4F	6	31	4.2
SPJ8□-LB6-M4F	8	31	4
SPJ10□-LB6-M4F	10	31.5	3
SPJ15□-LB6-M4F	15	33	3.3
SPJ20□-LB6-M4F	20	35	5.5



SPJ25-50 SPJ60-80

Lateral-Pagoda fitting Lateral-Female thread connection

Model/Size	D	H	Y
SPJ25□-LB6-M6F	25	47.5	6.5
SPJ30□-LB6-M6F	30	50	7
SPJ35□-LB6-M6F	35	50	7
SPJ40□-LB6-M6F	40	50	7.2
SPJ50□-LB6-M6F	50	52	9
SPJ60□-LR1-M8F	60	62	8
SPJ70□-LR1-M8F	70	63	9.5
SPJ80□-LR1-M8F	80	63	9.5

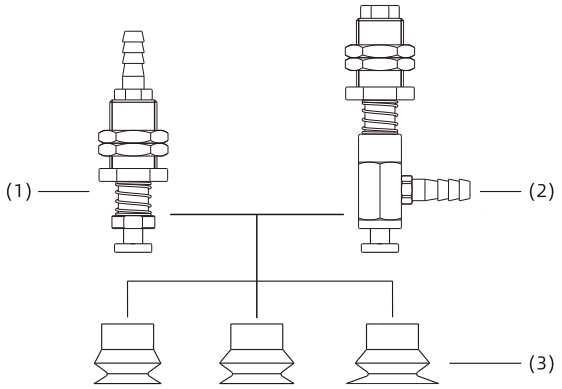
SPJ Series

Suction Cup with Level Compensator

Structure

◇ Consisting of replacement suction cup(3) and level compensator
◇ Plug-in fitting for suction cup
◇ Vertical vacuum port(1), male thread for mounting
◇ Lateral vacuum port(2), male thread for mounting

In the same series, replacement suction cup and level compensator can be combined as required



How to order

SPJ10N - F E 10 LB6 - M11
① ② ③ ④ ⑤ ⑥

① Model	② Level compensator type	③ Buffer type	④ Buffer stroke	⑤ Vacuum port connection	⑥ Mounting thread
SPJ10N	F - PSPF Series	E - External spring	3 10	B6 - Vertical, Pagoda fitting ϕ6 hose	M9 - M9×1
			4 15	LB6 - Lateral, Pagoda fitting ϕ6 hose	M11 - M11×1
			6 30	LR1 - Lateral, Rc1/8 Female thread	M14 - M14×1
					M16 - M16×1.5

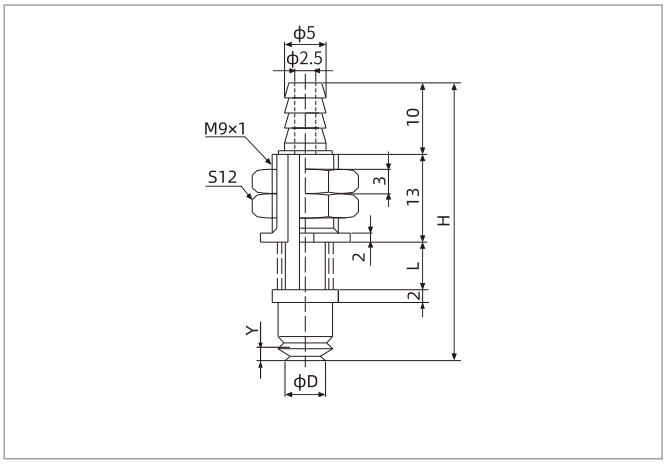
Selection

Model	Vacuum port direction Vertical-Pagoda fitting		Lateral-Pagoda fitting	
SPJ6□	SPJ6□-FE3B6-M9	SPJ6□-FE10B6-M9	SPJ6□-FE3LB6-M9	SPJ6□-FE10LB6-M9
SPJ8□	SPJ8□-FE3B6-M9	SPJ8□-FE10B6-M9	SPJ8□-FE3LB6-M9	SPJ8□-FE10LB6-M9
SPJ10□	SPJ10□-FE4B6-M11	SPJ10□-FE10B6-M11	SPJ10□-FE4LB6-M11	SPJ10□-FE10LB6-M11
SPJ15□	SPJ15□-FE4B6-M11	SPJ15□-FE10B6-M11	SPJ15□-FE4LB6-M11	SPJ15□-FE10LB6-M11
SPJ20□	SPJ20□-FE4B6-M11	SPJ20□-FE10B6-M11	SPJ20□-FE4LB6-M11	SPJ20□-FE10LB6-M11
SPJ25□	SPJ25□-FE6B6-M14	SPJ25□-FE15B6-M14	SPJ25□-FE6LB6-M14	SPJ25□-FE15LB6-M14
SPJ30□	SPJ30□-FE6B6-M14	SPJ30□-FE15B6-M14	SPJ30□-FE6LB6-M14	SPJ30□-FE15LB6-M14
SPJ35□	SPJ35□-FE6B6-M14	SPJ35□-FE15B6-M14	SPJ35□-FE6LB6-M14	SPJ35□-FE15LB6-M14
SPJ40□	SPJ40□-FE6B6-M14	SPJ40□-FE15B6-M14	SPJ40□-FE6LB6-M14	SPJ40□-FE15LB6-M14
SPJ50□	SPJ50□-FE6B6-M14	SPJ50□-FE15B6-M14	SPJ50□-FE6LB6-M14	SPJ50□-FE15LB6-M14
SPJ60□	-		SPJ60□-FE10LR1-M16	SPJ60□-FE30LB6-M16
SPJ70□	-		SPJ70□-FE10LR1-M16	SPJ70□-FE30LB6-M16
SPJ80□	-		SPJ80□-FE10LR1-M16	SPJ80□-FE30LB6-M16

SPJ Series

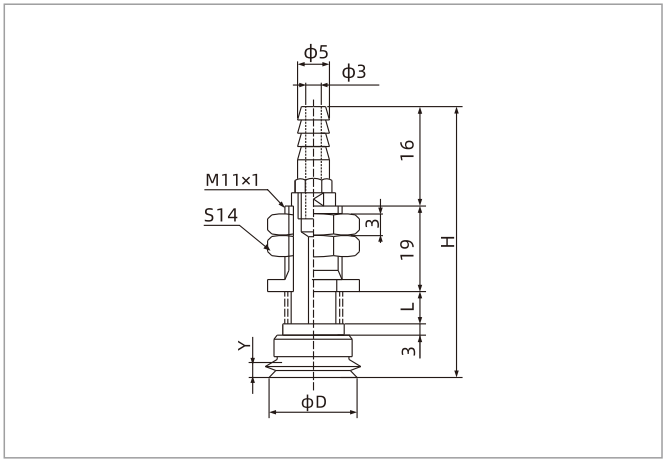
Suction Cup with Level Compensator

Dimensions(mm)



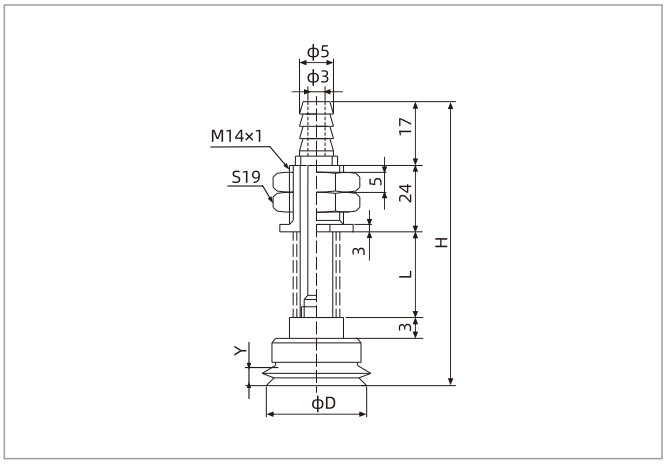
SPJ6-8 Vertical-Pagoda fitting

Model/Size	D	H	L	Y	Buffer stroke
SPJ6□-FE3B6-M9	6	40	6	4.2	3
SPJ6□-FE10B6-M9	6	54	20	4.2	10
SPJ8□-FE3B6-M9	8	40	6	4	3
SPJ8□-FE10B6-M9	8	54	20	4	10



SPJ10-20 Vertical-Pagoda fitting

Model/Size	D	H	L	Y	Buffer stroke
SPJ10□-FE4B6-M11	10	55.5	8	3	4
SPJ10□-FE10B6-M11	10	67.5	20	3	10
SPJ15□-FE4B6-M11	15	57	8	3.3	4
SPJ15□-FE10B6-M11	15	69	20	3.3	10
SPJ20□-FE4B6-M11	20	59	8	5.5	4
SPJ20□-FE10B6-M11	20	71	20	5.5	10



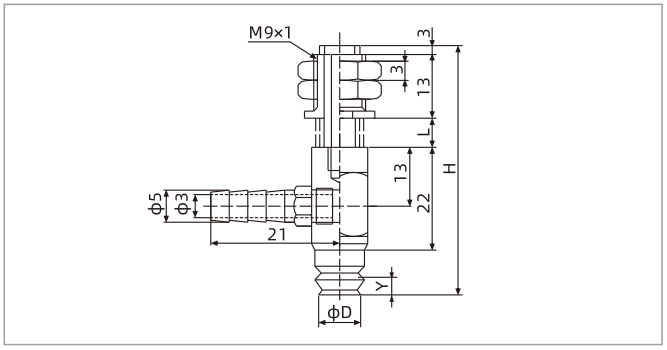
SPJ25-50 Vertical-Pagoda fitting

Model/Size	D	H	L	Y	Buffer stroke
SPJ25□-FE6B6-M14	25	72.5	13	6.5	6
SPJ25□-FE15B6-M14	25	89.5	30	6.5	15
SPJ30□-FE6B6-M14	30	75	13	7	6
SPJ30□-FE15B6-M14	30	92	30	7	15
SPJ35□-FE6B6-M14	35	75	13	7	6
SPJ35□-FE15B6-M14	35	92	30	7	15
SPJ40□-FE6B6-M14	40	75	13	7.2	6
SPJ40□-FE15B6-M14	40	92	30	7.2	15
SPJ50□-FE6B6-M14	50	77	13	9	6
SPJ50□-FE15B6-M14	50	94	30	9	15

SPJ Series

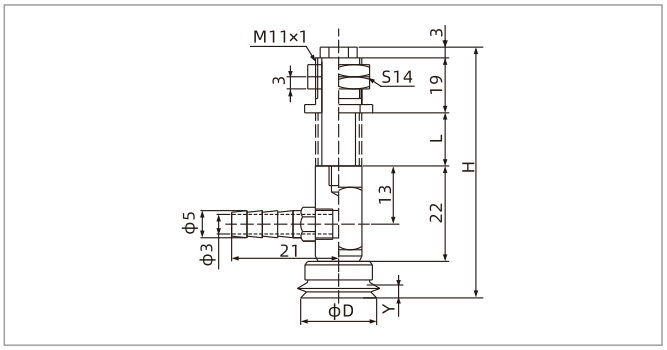
Suction Cup with Level Compensator

Dimensions(mm)



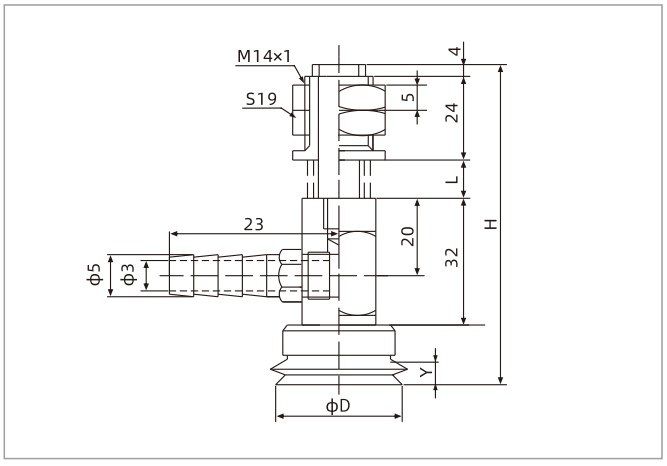
SPJ6-8 Lateral-Pagoda fitting

Model/Size	D	H	L	Y	Buffer stroke
SPJ6□-FE3LB6-M9	6	53	6	4.2	3
SPJ6□-FE10LB6-M9	6	67	20	4.2	10
SPJ8□-FE3LB6-M9	8	53	6	4	3
SPJ8□-FE10LB6-M9	8	67	20	4	10



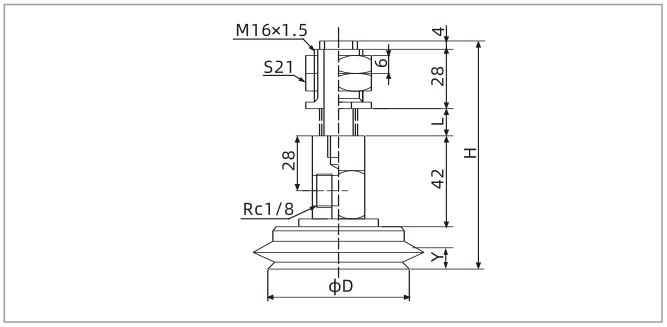
SPJ10-20 Lateral-Pagoda fitting

Model/Size	D	H	L	Y	Buffer stroke
SPJ10□-FE4LB6-M11	10	61.5	8	3	4
SPJ10□-FE10LB6-M11	10	73.5	20	3	10
SPJ15□-FE4LB6-M11	15	63	8	3.3	4
SPJ15□-FE10LB6-M11	15	75	20	3.3	10
SPJ20□-FE4LB6-M11	20	65	8	5.5	4
SPJ20□-FE10LB6-M11	20	77	20	5.5	10



SPJ25-50 Lateral-Pagoda fitting

Model/Size	D	H	L	Y	Buffer stroke
SPJ25□-FE6LB6-M14	25	88.5	13	6.5	6
SPJ25□-FE15LB6-M14	25	105.5	30	6.5	15
SPJ30□-FE6LB6-M14	30	91	13	7	6
SPJ30□-FE15LB6-M14	30	108	30	7	15
SPJ35□-FE6LB6-M14	35	91	13	7	6
SPJ35□-FE15LB6-M14	35	108	30	7	15
SPJ40□-FE6LB6-M14	40	91	13	7.2	6
SPJ40□-FE15LB6-M14	40	108	30	7.2	15
SPJ50□-FE6LB6-M14	50	93	13	9	6
SPJ50□-FE15LB6-M14	50	110	30	9	15



SPJ60-80 Lateral-Female thread connection

Model/size	D	H	L	Y	Buffer stroke
SPJ60□-FE10LR1-M16	60	114	20	8	10
SPJ60□-FE30LR1-M16	60	154	60	8	30
SPJ70□-FE10LR1-M16	70	115	20	9.5	10
SPJ70□-FE30LR1-M16	70	155	60	9.5	30
SPJ80□-FE10LR1-M16	80	115	20	9.5	10
SPJ80□-FE30LR1-M16	80	155	60	9.5	30

SOP Series

Circular Foam Rubber Suction Cup


STONE


ROUGH SURFACE

RoHS

Features

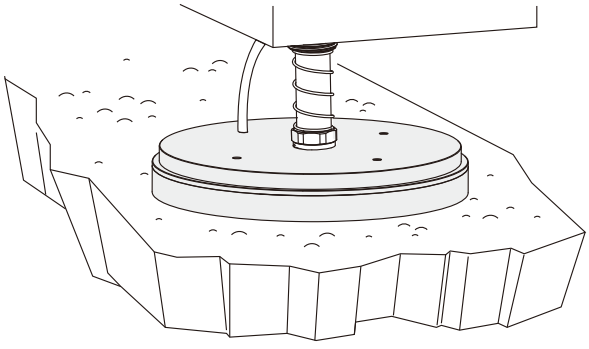
◇ Annular foam rubber
◇ Metal support plate
◇ NF(black) for Neoprene foam rubber, OF(orange) for Geranium foam rubber
◇ Available in various sizes

Advantages

◇ Long lifetime,good sealing and large suction force
◇ Large area support plate, light weight and high load
◇ NF and OF material optional for different working conditions
◇ Suitable for workpieces of various sizes and shapes

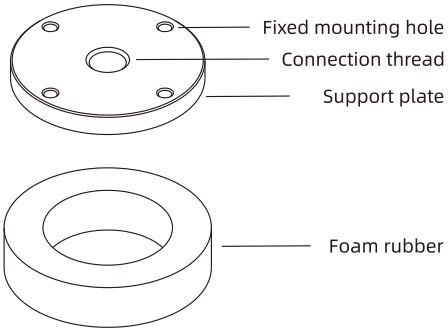
Applications

◇ Handling of workpieces with very rough or uneven surface such as buckle plate, embossed plate, marble, tile, cement board and grid metal plate
◇ NF for workpieces with rough surface and outdoor use. Good weather and ozone resistance, but poor in yield elasticity and not suitable for food industry.
◇ OF for workpieces with very rough surface. Good yield elasticity, wear resistance, tear resistance, high cut resistance and good ductility, but poor in oil resistance, heat resistance and aging resistance, not suitable for food industry.
◇ Pay attention to the use of water and oil environment
◇ It is recommended to use large flow vacuum generator
◇ For the use of the sponge suction cup, please refer to General Precautions on Page 24



Structure

◇ Consisting of metal support plate and foam rubber. Foam rubber is with gum, which can stick to the support plate directly. Foam rubber is comsumable, which can be ordered separately for replacement



SOP Series

Circular Foam Rubber Suction Cup

How to order

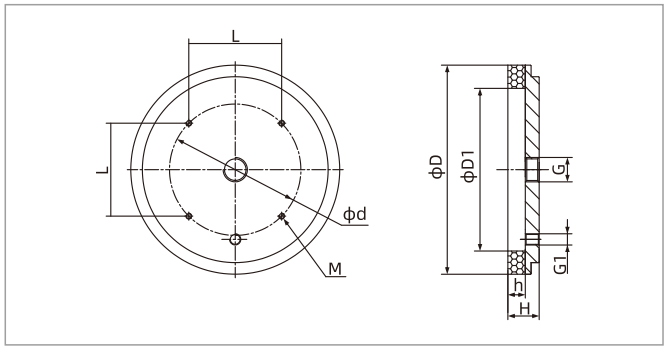
SOP 64 NF - G2F
① ② ③ ④

① Series	② Diameter		③ Material	④ Connection thread
SOP	40 - ϕ40mm	127 - ϕ127mm	NF - Neoprene foam rubber	Nil - Foam rubber only
	64 - ϕ64mm	180 - ϕ180mm	OF - Geranium foam rubber	G2F - G1/4 female thread
	92 - ϕ92mm	220 - ϕ220mm		G3F - G3/8 female thread
				G4F - G1/2 female thread

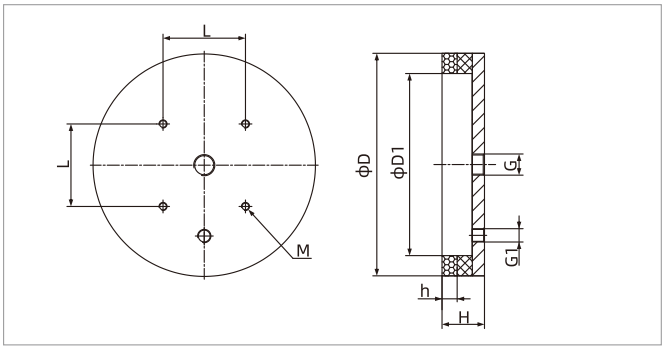
Selection

Model	Connection thread G2F	G3F	G4F	MPQ pcs
SOP40□	SOP40□-G2F	-	-	1
SOP64□	SOP64□-G2F	-	-	1
SOP92□	-	SOP92□-G3F	-	1
SOP127□	-	-	SOP127□-G4F	1
SOP180□	-	-	SOP180□-G4F	1
SOP220□	-	-	SOP220□-G4F	1

Dimensions(mm)



SOP40-180



SOP220

Model/Size	D	D1	H	h	G	G1	d	L	M	Weight g	Pull-out force N
SOP40□-G2F	40	20	25	15	G1/4	-	-	-	-	34.9	7.8
SOP64□-G2F	64	40	25	15	G1/4	-	40	-	-	82.1	35
SOP92□-G3F	92	64	26	15	G3/8	-	70	-	4-M5×0.8depth6	191.1	85
SOP127□-G4F	127	92	30	15	G1/2	G1/8	-	70	4-M5×0.8depth6	482.1	175
SOP180□-G4F	180	127	27	15	G1/2	G1/8	-	80	4-M5×0.8depth6	754.1	385
SOP220□-G4F	220	180	42	15	G1/2	G1/4	-	85	4-M8×1.25depth6	1570.9	635

◇ Note: 1. Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor.
The data may be different according to different workpiece surfaces.Recommend the length of vacuum hose to be as short as possible, max 2m.
2. The dimensional tolerance conforms to GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

SNP Series

Rectangular Foam Rubber Suction Cup


STONE


ROUGH SURFACE

RoHS

Features

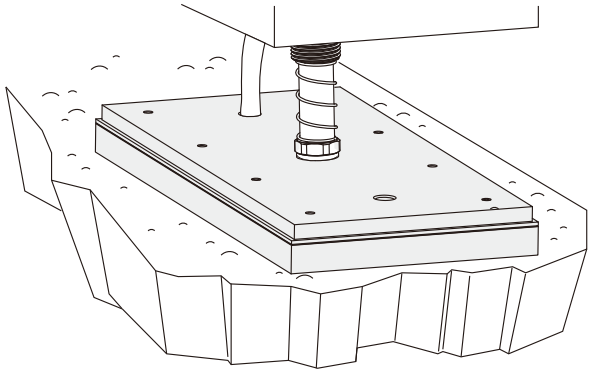
◇ Annular foam rubber
◇ Metal support plate
◇ NF(black) for Neoprene foam rubber, OF(orange) for Geranium foam rubber
◇ Available in various sizes

Advantages

◇ Long lifetime, good sealing and large suction force
◇ Large area support plate with light weight and high load
◇ NF and OF material optional for different working conditions
◇ Suitable for workpieces of various sizes and shapes

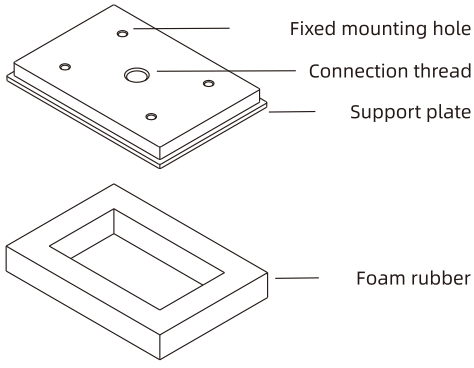
Applications

◇ Handling of workpieces with very rough or uneven surface such as buckle plate, embossed plate, marble, tile, cement board and grid metal plate
◇ NF for workpieces with rough surface and outdoor use.Good weather and ozone resistance, but poor in yield elasticity and storage stability,not suitable for food industry
◇ OF for workpieces with very rough surface.Good yield elasticity, wear resistance, tear resistance, high cut resistance and good ductility, but poor in oil resistance,heat resistance and aging resistance, not suitable for food industry
◇ Pay attention to the use of water and oil environment
◇ It is recommended to use large flow vacuum generator
◇ For the use of the sponge suction cup, please refer to General Precautions on Page 24



Structure

◇ Consisting of metal support plate and foam rubber. Foam rubber is with gum, which can stick to the support plate directly. Foam rubber is comsumable, which can be ordered separately for replacement



SNP Series

Rectangular Foam Rubber Suction Cup

How to order

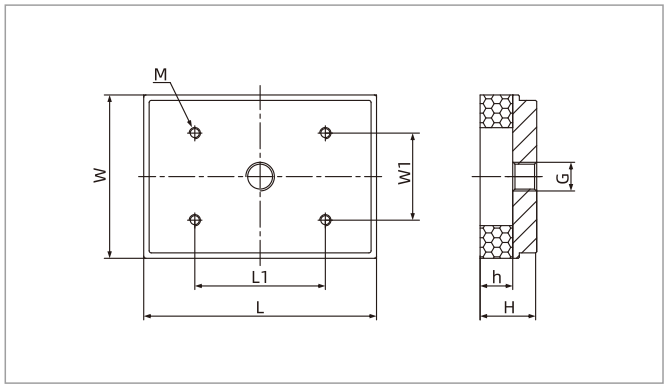
SNP 50×135 NF - G2F
① ② ③ ④

① Series	② Size	③ Material	④ Connection thread
SNP	50×135	NF - Neoprene foam rubber	Nil - Foam rubber only
	60×135	OF - Geranium foam rubber	G2F - G1/4 female thread
	75×107		G3F - G3/8 female thread
	68×290		G4F - G1/2 female thread
	140×290		

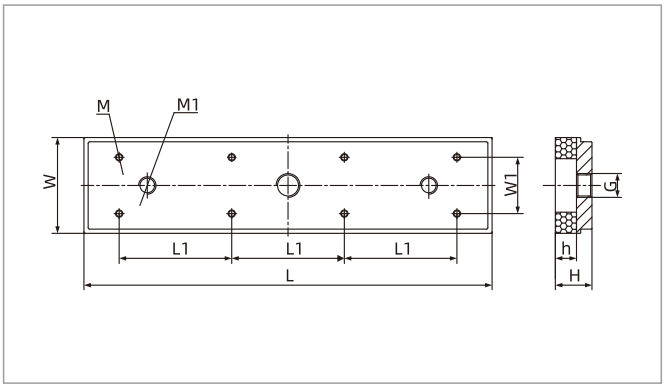
Selection

Model	Connection thread G2F	G3F	G4F	MPQ pcs
SNP50×135□	SNP50×135□-G2F	-	-	1
SNP60×135□	SNP60×135□-G2F	-	-	1
SNP75×107□	SNP75×107□-G2F	-	-	1
SNP68×290□	-	SNP68×290□-G3F	-	1
SNP140×290□	-	-	SNP140×290□-G4F	1

Dimensions(mm)



SNP50×135 SNP60×135 SNP75×107



SNP68×290 SNP140×290

Model/Size	L	W	L1	W1	G	H	h	M	M1	Weight g	Pull-out force N
SNP50×135□-G2F	135	50	80	30	G1/4	26	15	4-M5×0.8depth7	-	202	60
SNP60×135□-G2F	135	60	80	40	G1/4	26	15	4-M5×0.8depth7	-	246	80
SNP75×107□-G2F	107	75	60	40	G1/4	26	15	4-M5×0.8depth7	-	234	90
SNP68×290□-G3F	290	68	80	40	G3/8	26	15	8-M5×0.8depth7	2-M12×1.75	587	250
SNP140×290□-G4F	290	140	80	100	G1/2	26	15	8-M5×0.8depth7	2-M12×1.75	1,235	720

◇ Note: 1. Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces.Recommend the length of vacuum hose to be as short as possible, max 2m.
2. The dimensional tolerance conforms to GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

TXN Series

Vacuum Gripper-Mini Type

ELECTRONICS PACKAGING

Features

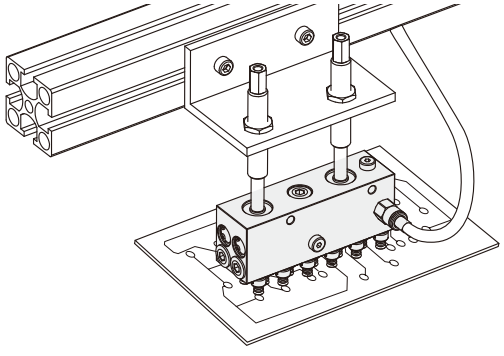
◇ Small size, simple structure and light weight
◇ Various vacuum sources, can select built-in vacuum generator or external blower
◇ Sponge type: Conventional sponge, Mark free sponge,Conductive sponge can be selected
◇ Suction cup type: The size, material and rows of suction cups are optional

Advantages

◇ It is easy to install and maintain
◇ Customers can choose accurately according to the actual application, built-in vacuum generator structure can save space and create vacuum fastly, easy to control
◇ Sponge type can achieve flexible contact, when touching with glass and other fragile workpieces, it could be mark free and non-positioning suction
◇ Suction cup type has throttling effect, which can be used to adsorb hollow porous, uneven, different shapes of workpieces

Applications

◇ Used for handling light and small fragile workpieces, such as electronics, glass screen, electronic components and PCB board, etc.
◇ Sponge type can also be used for sorting and labeling in packaging industry



Structure

◇ The main body is made of aluminum alloy
◇ The vacuum gripper TXN22 × 38/TXN22 × 76 are without vacuum generator, others are with built-in vacuum generator

TXN22×38/TXN22×76

Vacuum Gripper-Mini Type

Features

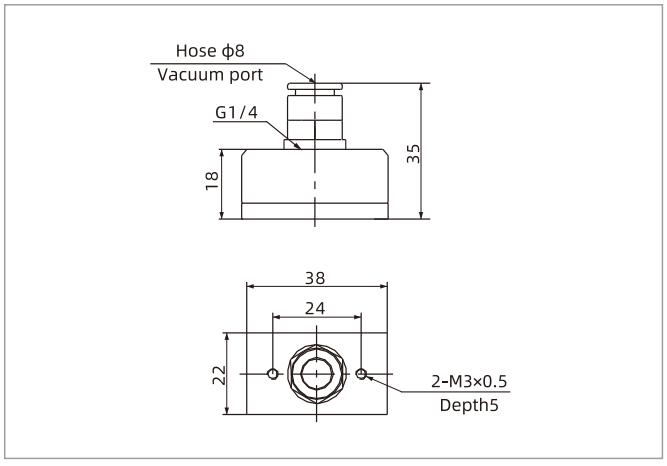
◇ The gripper is used in the handling and sorting process of light and small workpieces. It is suitable to handle multihole workpieces and partial leakage workpieces

Technical parameters

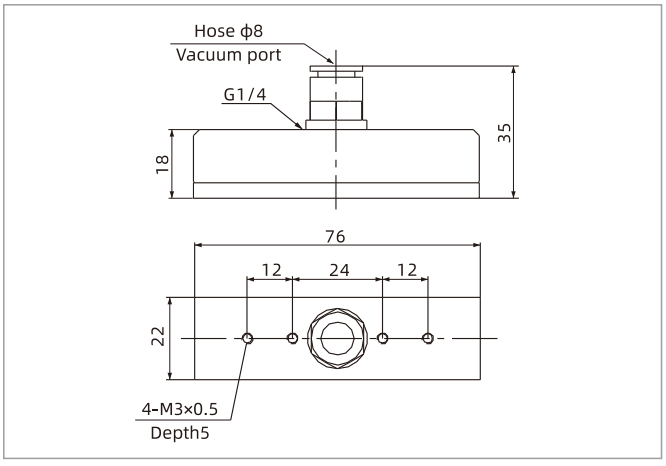
Model	Theoretical suction force N	Recommended min. flow of vacuum generator NL/min	Optional function	Working temperature ℃	Weight g	Recommended hose dia.(mm) Vacuum port (V)
TXN22×38	18	≥40	Mark free/Conductive	0-60	45	ϕ8
TXN22×76	34	≥60	Mark free/Conductive	0-60	68	ϕ8

◇ Note: 1. Testing vacuum level is -60kPa, the data of theoretical suction force as above are figured out in the condition that the vacuum gripper is fully covered by a rigid airtight workpiece, and without considering safety factor.
2. The mark free in the optional function of the above table indicates that special materials are attached to the sponge surface to reduce the mark on the contact surface.
3. Conductivity in the optional function shown in the above table indicates the use of special conductive sponge materials.

Dimensions(mm)



TXN22×38



TXN22×76

Spare parts selection

Item	Sponge model	Dimension mm	Application
22×38 Conventional sponge	TXN38-A	22×38×4	Conventional application
22×38 Mark free sponge	TXN38-AT	22×38×4	Mark free application
22×38 Conductive sponge	TXN38-CA	22×38×4	Conductive application
22×76 Conventional sponge	TXN76-A	22×76×4	Conventional application
22×76 Mark free sponge	TXN76-AT	22×76×4	Mark free application
22×76 Conductive sponge	TXN76-CA	22×76×4	Conductive application

PSPE Series

Small and Light Level Compensator

ELECTRONICS

RoHS

Features

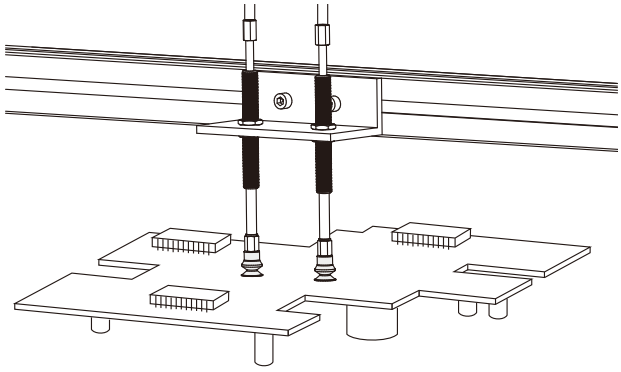
◇ Level compensator with built-in spring, small elasticity
◇ Small size and light weight
◇ The guide rod is made of stainless steel
◇ Oilless wear-resistant bushing is built in the guide sleeve

Advantages

◇ Avoid pollution and external mechanical force, flexible contact
◇ Suitable for fast handling in small space
◇ Resistant to environment, corrosion and abrasion
◇ Improve the life time of the products and reduce the noise of the products
◇ Ensure the accurate positioning of the workpieces

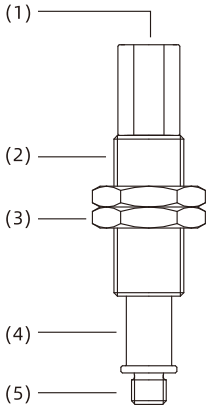
Applications

◇ Suitable for electronic industry
◇ Suitable for handling light and small workpieces with flexible contact
◇ Suitable for handling workpieces with height difference
◇ The non-rotating level compensator is suitable for the working condition requiring accurate positioning



Structure

◇ (1) Vacuum generator connection
◇ (2) Guide sleeve
◇ (3) Mounting nut
◇ (4) Guide rod
◇ (5) Suction cup connection



PSPE Series

Small and Light Level Compensator

AIRBEST

How to order

PSPE - I 10 L A4 M5M - M10
① ② ③ ④ ⑤ ⑥ ⑦

① Series	② Buffer style	③ Buffer stroke		④ Rotary type	⑤ Vacuum port connection	⑥ Suction cup connection	⑦ Mounting thread
PSPE	I - Built-in spring	6	25	Nil - Vertical rotating	Nil - Default	M5F - M5×0.8 female thread	M8 - M8×1
		10	30	R - Vertical non-rotating	A4 - One-touch fitting,ϕ4 hose	M5M - M5×0.8 male thread	M10 - M10×1
		15	40	L - Lateral rotating	A6 - One-touch fitting,ϕ6 hose	M8F - M8×1.25 female thread	M14 - M14×1
		20	50	B - Lateral non-rotating		M8M - M8×1.25 male thread	

Selection-Vertical direction

Model/Connection thread M5M	RM5M	M5F	M8M	M8F
PSPE-I10M5M-M10	PSPE-I10RM5M-M10	PSPE-I10M5F-M10	PSPE-I10M8M-M14	PSPE-I10M8F-M14
PSPE-I20M5M-M10	PSPE-I20RM5M-M10	PSPE-I20M5F-M10	PSPE-I20M8M-M14	PSPE-I20M8F-M14
PSPE-I30M5M-M10	PSPE-I30RM5M-M10	PSPE-I30M5F-M10	PSPE-I30M8M-M14	PSPE-I30M8F-M14
PSPE-I40M5M-M10	PSPE-I40RM5M-M10	PSPE-I40M5F-M10	-	-
PSPE-I50M5M-M10	PSPE-I50RM5M-M10	PSPE-I50M5F-M10	PSPE-I50M8M-M14	PSPE-I50M8F-M14

Selection-Lateral direction

Model/Connection thread LA4M5M	LA6M5M	BA4M5M	BA6M5M
PSPE-I6LA4M5M-M8	PSPE-I6LA6M5M-M8	PSPE-I6BA4M5M-M8	PSPE-I6BA6M5M-M8
PSPE-I10LA4M5M-M8	PSPE-I10LA6M5M-M8	PSPE-I10BA4M5M-M8	PSPE-I10BA6M5M-M8
PSPE-I15LA4M5M-M8	PSPE-I15LA6M5M-M8	PSPE-I15BA4M5M-M8	PSPE-I15BA6M5M-M8
PSPE-I25LA4M5M-M8	PSPE-I25LA6M5M-M8	PSPE-I25BA4M5M-M8	PSPE-I25BA6M5M-M8
PSPE-I10LA4M5M-M10	PSPE-I10LA6M5M-M10	PSPE-I10BA4M5M-M10	PSPE-I10BA6M5M-M10
PSPE-I20LA4M5M-M10	PSPE-I20LA6M5M-M10	PSPE-I20BA4M5M-M10	PSPE-I20BA6M5M-M10
PSPE-I30LA4M5M-M10	PSPE-I30LA6M5M-M10	PSPE-I30BA4M5M-M10	PSPE-I30BA6M5M-M10
PSPE-I40LA4M5M-M10	PSPE-I40LA6M5M-M10	PSPE-I40BA4M5M-M10	PSPE-I40BA6M5M-M10
PSPE-I50LA4M5M-M10	PSPE-I50LA6M5M-M10	PSPE-I50BA4M5M-M10	PSPE-I50BA6M5M-M10

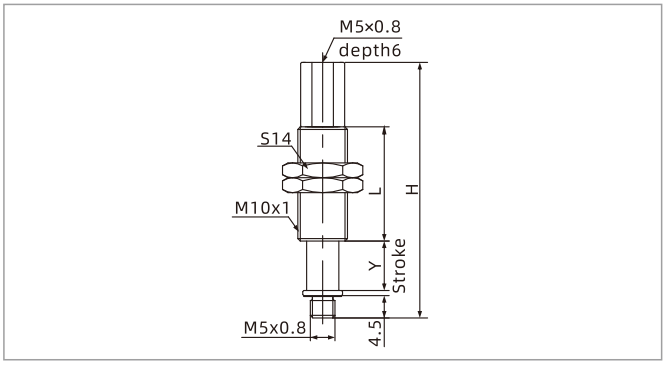
◇ Note: It is suggested that the actual working compressed stroke of level compensator should not exceed 50% of its max. compressed stroke

PSPE Series

Small and Light Level Compensator

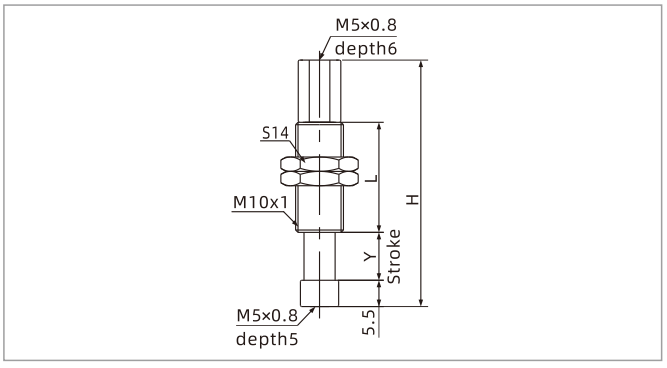
AIRBEST

Dimensions(mm)



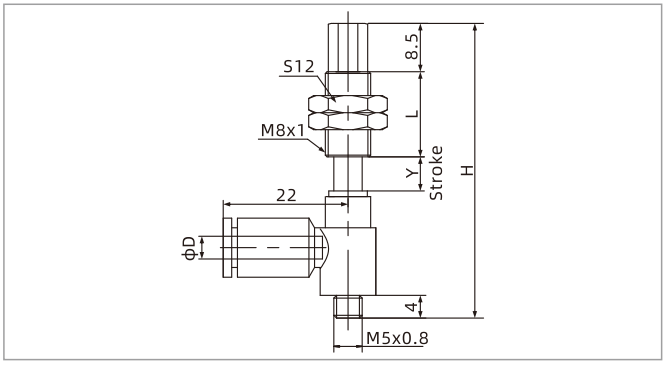
M5M-Vertical male thread connection

Model/Size	H	L	Y	Weight g	F1 N	F2 N
PSPE-I10(R)M5M-M10	51.5	23	10	22	1.0	3.0
PSPE-I20(R)M5M-M10	89.5	51	20	34	1.0	3.0
PSPE-I30(R)M5M-M10	99.5	51	30	36	1.0	3.0
PSPE-I40(R)M5M-M10	135.5	77	40	47	1.0	3.0
PSPE-I50(R)M5M-M10	145.5	77	50	50	1.0	3.0



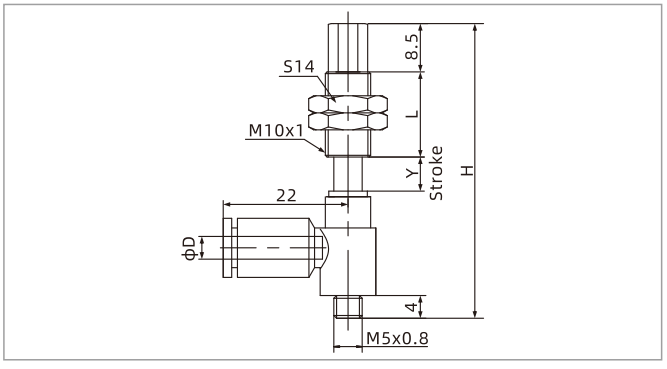
M5F-Vertical female thread connection

Model/Size	H	L	Y	Weight g	F1 N	F2 N
PSPE-I10M5F-M10	51.5	23	10	23	1.0	3.0
PSPE-I20M5F-M10	89.5	51	20	36	1.0	3.0
PSPE-I30M5F-M10	99.5	51	30	38	1.0	3.0
PSPE-I40M5F-M10	135.5	77	40	49	1.0	3.0
PSPE-I50M5F-M10	145.5	77	50	51	1.0	3.0



M5M-Lateral male thread connection

Model/Size	H	L	Y	D	Weight g	F1 N	F2 N
PSPE-I6L(B)A4M5M-M8	52	15	6	4	19	0.8	1.2
PSPE-I6L(B)A6M5M-M8	52	15	6	6	20	0.8	1.2
PSPE-I10L(B)A4M5M-M8	84	43	10	4	26	0.8	1.2
PSPE-I10L(B)A6M5M-M8	84	43	10	6	28	0.8	1.2
PSPE-I15L(B)A4M5M-M8	89	43	15	4	27	0.8	1.2
PSPE-I15L(B)A6M5M-M8	89	43	15	6	29	0.8	1.2
PSPE-I25L(B)A4M5M-M8	99	43	25	4	29	0.8	1.2
PSPE-I25L(B)A6M5M-M8	99	43	25	6	30	0.8	1.2



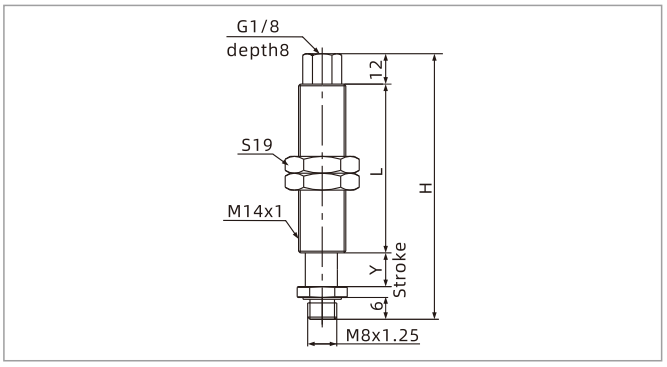
M5M-Lateral male thread connection

Model/Size	H	L	Y	D	Weight g	F1 N	F2 N
PSPE-I10L(B)A4M5M-M10	64	23	10	4	26	1.0	3.0
PSPE-I10L(B)A6M5M-M10	64	23	10	6	28	1.0	3.0
PSPE-I20L(B)A4M5M-M10	102	51	20	4	44	1.0	3.0
PSPE-I20L(B)A6M5M-M10	102	51	20	6	46	1.0	3.0
PSPE-I30L(B)A4M5M-M10	112	51	30	4	46	1.0	3.0
PSPE-I30L(B)A6M5M-M10	112	51	30	6	48	1.0	3.0
PSPE-I40L(B)A4M5M-M10	148	77	40	4	59	1.0	3.0
PSPE-I40L(B)A6M5M-M10	148	77	40	6	62	1.0	3.0
PSPE-I50L(B)A4M5M-M10	158	77	50	4	62	1.0	3.0
PSPE-I50L(B)A6M5M-M10	158	77	50	6	65	1.0	3.0

PSPE Series

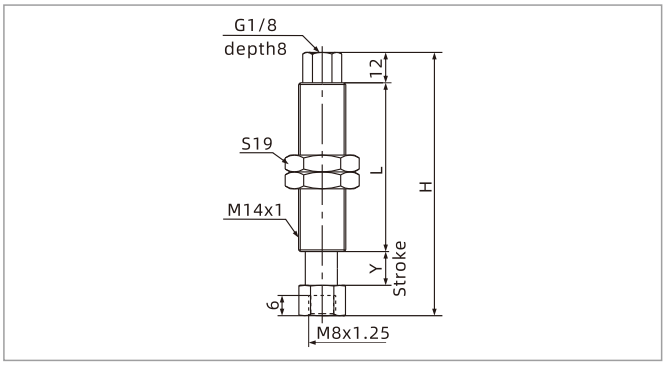
Small and Light Level Compensator

Dimensions(mm)



M8M-Vertical male thread connection

Model/Size	H	L	Y	Weight g	F1 N	F2 N
PSPE-I10M8M-M14	84.5	50	10	68	2.0	5.5
PSPE-I20M8M-M14	90	50	20	71	2.0	5.5
PSPE-I30M8M-M14	100	50	30	76	2.0	5.5
PSPE-I50M8M-M14	145	50	50	102	2.0	5.5



M8F-Vertical female thread connection

Model/Size	H	L	Y	Weight g	F1 N	F2 N
PSPE-I10M8F-M14	75	44	10	70	2.0	5.5
PSPE-I20M8F-M14	85	44	20	73	2.0	5.5
PSPE-I30M8F-M14	95	44	30	80	2.0	5.5
PSPE-I50M8F-M14	146	75	50	106	2.0	5.5

◇ Note: "F1" means spring force at 0 stroke
"F2" means spring force at max. stroke

PSPT Series

Universal Level Compensator

UNIVERSAL

RoHS

Features

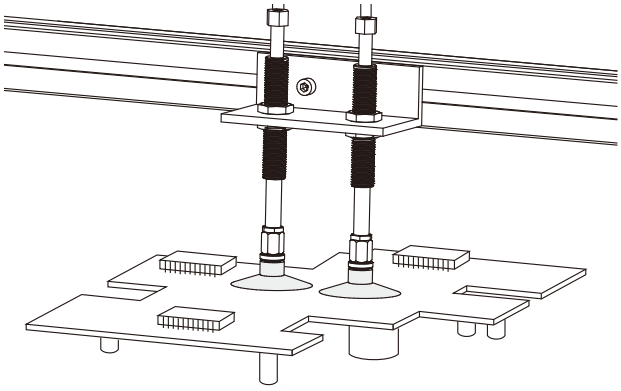
◇ Oilless, wear-resistant bushing is built in the guide sleeve
◇ Built-in buffer spring and external buffer spring
◇ Various buffer stroke specifications are available
◇ Light duty and heavy duty can be selected

Advantages

◇ Improve the lifetime of the products and reduce the noise of the products
◇ Flexible contact with fragile workpieces, compensate the height difference of workpieces
◇ Suitable for various working conditions

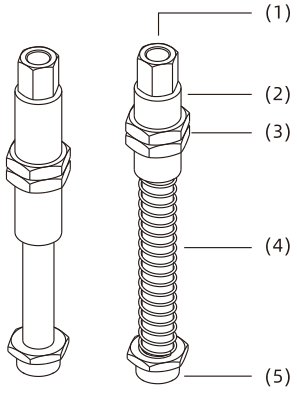
Applications

◇ Suitable for handling workpieces with height difference
◇ Handle parts sensitive to pressure with flexible contact
◇ All kinds of connection specifications, universal type, suitable for various industries



Structure

◇ (1) Vacuum generator connection
◇ (2) Guide sleeve
◇ (3) Mounting nut
◇ (4) Spring
◇ (5) Suction cup connection



PSPT Series

Universal Level Compensator

How to order

PSPT - I 10 LM5 G1M - M16 - H

① ② ③ ④ ⑤ ⑥ ⑦

① Series	② Buffer type	③ Buffer stroke	④ Rotary type	⑤ Suction cup connection	⑥ Mounting thread	⑦ Heavy load
PSPT	I - Built-in spring E - External spring	10 60 20 75 30 90 50 110	Nil - Vertical rotating R - Vertical non-rotating LM5 - Lateral rotating	G1F - G1/8 female thread G2F - G1/4 female thread G1M - G1/8 male thread G2M - G1/4 male thread G3M - G3/8 male thread	M16 - M16×1 M18 - M18×1	Nil - Standard H - Heavy load

Selection

Model/Connection thread G1M	LM5G1M	G1F	G2F	
PSPT-I10G1M-M16	PSPT-I10LM5G1M-M16	PSPT-I10G1F-M16	PSPT-I10G2F-M18	PSPT-I10G2F-M18-H
PSPT-I20G1M-M16	PSPT-I20LM5G1M-M16	PSPT-I20G1F-M16	PSPT-I20G2F-M18	PSPT-I20G2F-M18-H
PSPT-I30G1M-M16	PSPT-I30LM5G1M-M16	PSPT-I30G1F-M16	PSPT-I30G2F-M18	PSPT-I30G2F-M18-H
PSPT-I50G1M-M16	PSPT-I50LM5G1M-M16	PSPT-I50G1F-M16	PSPT-I50G2F-M18	PSPT-I50G2F-M18-H

Model/Connection thread G2M			RG2M	RG3M
PSPT-I10G2M-M18	PSPT-E60G2M-M18	PSPT-I10G2M-M18-H	PSPT-I10RG2M-M18	PSPT-I10RG3M-M18
PSPT-I20G2M-M18	PSPT-E75G2M-M18	PSPT-I20G2M-M18-H	PSPT-I20RG2M-M18	PSPT-I20RG3M-M18
PSPT-I30G2M-M18	PSPT-E90G2M-M18	PSPT-I30G2M-M18-H	PSPT-I30RG2M-M18	PSPT-I30RG3M-M18
PSPT-I50G2M-M18	PSPT-E110G2M-M18	PSPT-I50G2M-M18-H	PSPT-I50RG2M-M18	PSPT-I50RG3M-M18

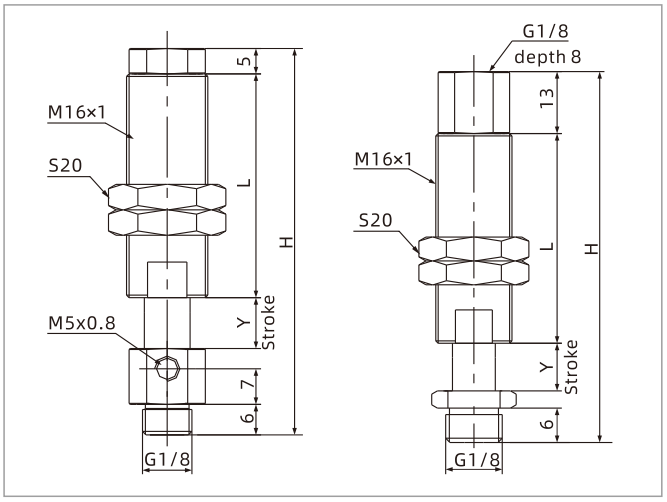
Model/Connection thread G3M		
PSPT-I10G3M-M18	PSPT-E60G3M-M18	PSPT-I10G3M-M18-H
PSPT-I20G3M-M18	PSPT-E75G3M-M18	PSPT-I20G3M-M18-H
PSPT-I30G3M-M18	PSPT-E90G3M-M18	PSPT-I30G3M-M18-H
PSPT-I50G3M-M18	PSPT-E110G3M-M18	PSPT-I50G3M-M18-H

◇ Note: It is suggested that the actual working compressed stroke of level compensator should not exceed 50% of its max. compressed stroke

PSPT Series

Universal Level Compensator

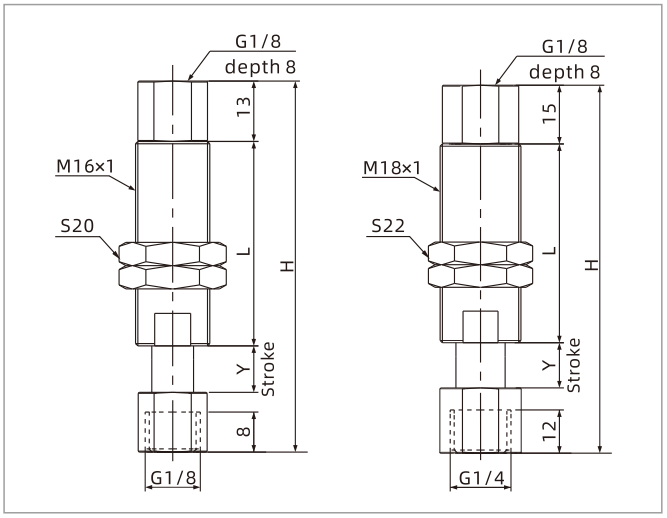
Dimensions(mm)



PSPT-I□LM5G1M-M16　　PSPT-I□G1M-M16

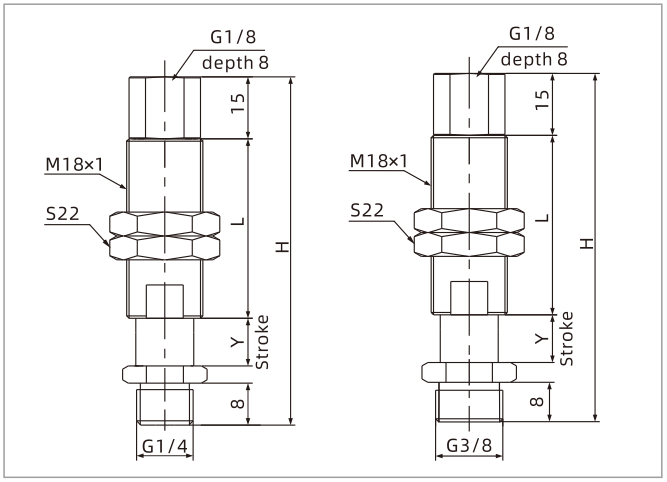
Model/Size	H	L	Y	Weight g	F1 N	F2 N
PSPT-I10LM5G1M-M16	76	44	10	71	2.0	5.5
PSPT-I20LM5G1M-M16	86	44	20	89	2.0	5.5
PSPT-I30LM5G1M-M16	96	44	30	102	2.0	5.5
PSPT-I50LM5G1M-M16	147	75	50	135	2.0	5.5
PSPT-I10G1M-M16	76	44	10	80	2.0	5.5
PSPT-I20G1M-M16	86	44	20	85	2.0	5.5
PSPT-I30G1M-M16	96	44	30	107	2.0	5.5
PSPT-I50G1M-M16	147	75	50	132	2.0	5.5

◇ Note: "F1" means spring force at 0 stroke
"F2" means spring force at max. stroke



PSPT -I□G1F-M16　　PSPT -I□G2F-M18

Model/Size	H	L	Y	Weight g	F1 N	F2 N
PSPT-I10G1F-M16	80	44	10	85	2.0	5.5
PSPT-I20G1F-M16	90	44	20	90	2.0	5.5
PSPT-I30G1F-M16	100	44	30	108	2.0	5.5
PSPT-I50G1F-M16	151	75	50	135	2.0	5.5
PSPT-I10G2F-M18	70.5	28	10	93	4.0	7.0
PSPT-I20G2F-M18	90.5	38	20	108	4.0	7.0
PSPT-I30G2F-M18	110.5	48	30	121	4.0	7.0
PSPT-I50G2F-M18	150.5	68	50	151	4.0	7.0
PSPT-I10G2F-M18-H	70.5	28	10	93	9.0	27.0
PSPT-I20G2F-M18-H	90.5	38	20	108	9.0	27.0
PSPT-I30G2F-M18-H	110.5	48	30	121	9.0	27.0
PSPT-I50G2F-M18-H	150.5	68	50	151	9.0	27.0



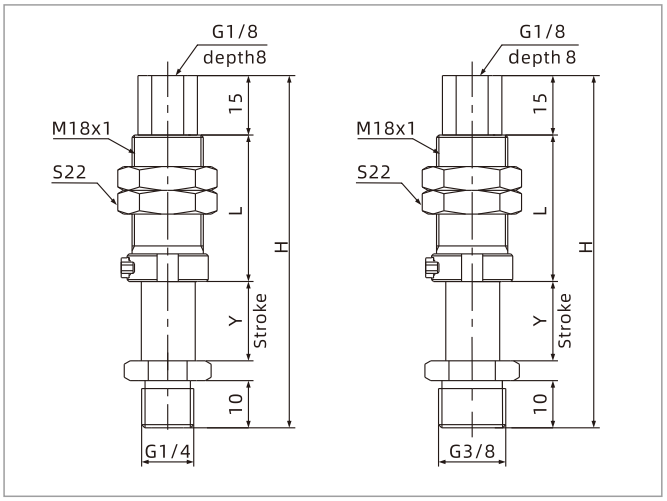
PSPT -I□G2M-M18　　PSPT -I□G3M-M18

Model/Size	H	L	Y	Weight g	F1 N	F2 N
PSPT-I10G2M-M18	65	28	10	103	4.0	7.0
PSPT-I20G2M-M18	85	38	20	117	4.0	7.0
PSPT-I30G2M-M18	105	48	30	135	4.0	7.0
PSPT-I50G2M-M18	145	68	50	169	4.0	7.0
PSPT-I10G3M-M18	65	28	10	105	4.0	7.0
PSPT-I20G3M-M18	85	38	20	123	4.0	7.0
PSPT-I30G3M-M18	105	48	30	142	4.0	7.0
PSPT-I50G3M-M18	145	68	50	177	4.0	7.0

PSPT Series

Universal Level Compensator

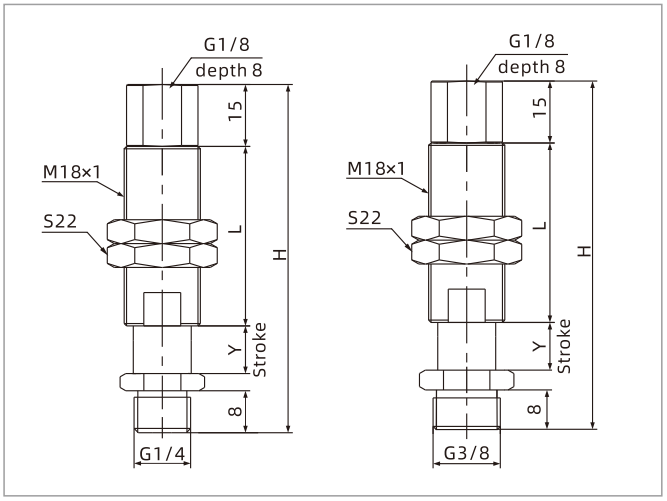
Dimensions(mm)



PSPT-I□RG2M-M18　　PSPT-I□RG3M-M18

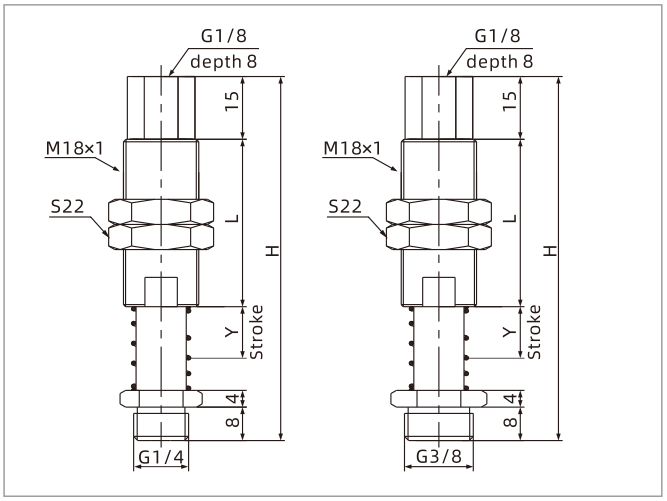
Model/Size	H	L	Y	Weight g	F1 N	F2 N
PSPT-I10RG2M-M18	70	30	10	103	4.0	7.0
PSPT-I20RG2M-M18	90	40	20	117	4.0	7.0
PSPT-I30RG2M-M18	110	50	30	135	4.0	7.0
PSPT-I50RG2M-M18	150	70	50	169	4.0	7.0
PSPT-I10RG3M-M18	70	30	10	105	4.0	7.0
PSPT-I20RG3M-M18	90	40	20	123	4.0	7.0
PSPT-I30RG3M-M18	110	50	30	142	4.0	7.0
PSPT-I50RG3M-M18	150	70	50	177	4.0	7.0

◇ Note: "F1" means spring force at 0 stroke
"F2" means spring force at max. stroke



PSPT-I□G2M-M18-H　　PSPT-I□G3M-M18-H

Model/Size	H	L	Y	Weight g	F1 N	F2 N
PSPT-I10G2M-M18-H	65	28	10	103	9.0	27.0
PSPT-I20G2M-M18-H	85	38	20	117	9.0	27.0
PSPT-I30G2M-M18-H	105	48	30	135	9.0	27.0
PSPT-I50G2M-M18-H	145	68	50	169	9.0	27.0
PSPT-I10G3M-M18-H	65	28	10	105	9.0	27.0
PSPT-I20G3M-M18-H	85	38	20	123	9.0	27.0
PSPT-I30G3M-M18-H	105	48	30	142	9.0	27.0
PSPT-I50G3M-M18-H	145	68	50	177	9.0	27.0



PSPT-E□G2M-M18　　PSPT-E□G3M-M18

Model/Size	H	L	Y	Weight g	F1 N	F2 N
PSPT-E60G2M-M18	150	40	60	171	4.5	17.0
PSPT-E75G2M-M18	170	40	75	185	4.5	17.0
PSPT-E90G2M-M18	185	40	90	196	4.5	17.0
PSPT-E110G2M-M18	205	40	110	216	4.5	17.0
PSPT-E60G3M-M18	150	40	60	176	4.5	17.0
PSPT-E75G3M-M18	170	40	75	192	4.5	17.0
PSPT-E90G3M-M18	185	40	90	205	4.5	17.0
PSPT-E110G3M-M18	205	40	110	221	4.5	17.0

◇ Note:"F1"means spring force at 0 stroke,
"F2"means spring force at max. stroke

PSPL Series

Retractive Level Compensator

ELECTRONICS

RoHS

Features

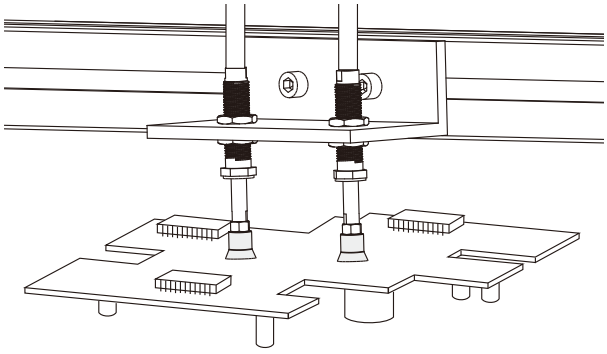
◇ Level compensator with built-in spring, small elasticity
◇ Small size and light weight
◇ special surface treatment for guide rod
◇ Guide sleeve with built-in resin bushing
◇ Retractive structure design

Advantages

◇ Avoid pollution and external mechanical force, flexible contact
◇ Suitable for fast handling in small space
◇ Resistant to environment, corrosion and abrasion
◇ Reduce metal dust, special for dust-free working condition
◇ During the operation, the hose is static and without transverse load

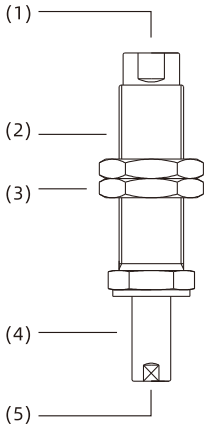
Applications

◇ Suitable for electronic industry
◇ Suitable for handling light and small workpieces with flexible contact
◇ Suitable for handling workpieces with height difference
◇ Suitable for dust-free working condition



Structure

◇ (1) Vacuum generator connection
◇ (2) Guide sleeve
◇ (3) Mounting nut
◇ (4) Guide rod
◇ (5) Suction cup connection



PSPL Series

Retractive Level Compensator

How to order

PSPL - I 10 R M5F - M10

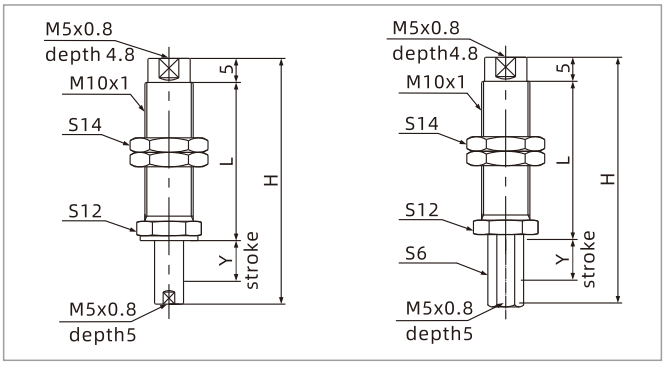
① ② ③ ④ ⑤ ⑥

□ Series	□ Buffer style	③ Buffer stroke	□ Rotary type	⑤ Vacuum port connection	⑥ Mounting thread
PSPL	I - Built-in spring	3 10 15 20	Nil - Vertical rotating R - Vertical non-rotating	M5F - M5×0.8 female thread	M10 - M10×1

Selection

Model/Buffer stroke	3	10	15	20
PSPL-I□M5F-M10	PSPL-I3M5F-M10	PSPL-I10M5F-M10	PSPL-I15M5F-M10	PSPL-I20M5F-M10
PSPL-I□RM5F-M10	-	PSPL-I10RM5F-M10	PSPL-I15RM5F-M10	PSPL-I20RM5F-M10

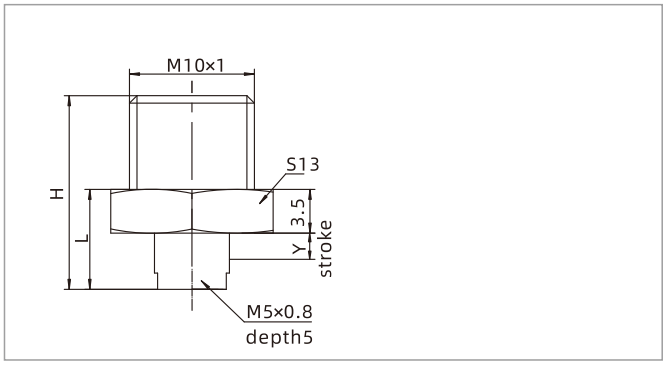
Dimensions(mm)



PSPL-I□M5F-M10 PSPL-I□RM5F-M10

Model/Size	H	L	Y	F1 N	F2 N
PSPL-I10(R)M5F-M10	51	31.8	10	1.0	1.4
PSPL-I15(R)M5F-M10	61	36.8	15	1.0	1.4
PSPL-I20(R)M5F-M10	71	41.8	20	1.0	1.4

◇ Note: 1. "F1"means spring force at 0 stroke, "F2" means spring force at max. stroke
2. The locking torque of M10 nut is 2.5 ~ 3.5N.M, please work within the specified torque range



PSPL-I3M5F-M10

Model/Size	H	L	Y	F1 N	F2 N
PSPL-I3M5F-M10	16.5	9	3	0.7	1.0

◇ Note: 1. "F1"means spring force at 0 stroke, "F2" means spring force at max. stroke

PSPS Series

Retractive Level Compensator

ELECTRONICS

Features

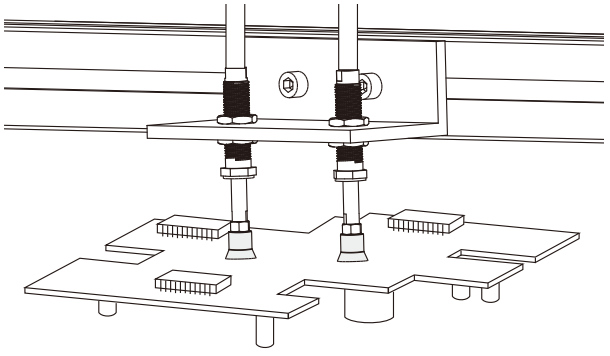
◇ Level compensator with built-in spring, small elasticity
◇ Small size and light weight
◇ Made of stainless steel
◇ Guide sleeve with built-in resin bushing
◇ Retractive structure design

Advantages

◇ Avoid pollution and external mechanical force, flexible contact
◇ Suitable for fast handling in small space
◇ Resistant to environment, corrosion and abrasion
◇ Reduce metal dust, special for dust-free working condition
◇ During the operation, the hose is static and without transverse load

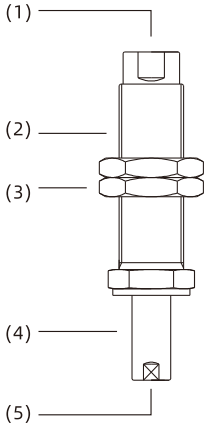
Applications

◇ Suitable for electronic industry
◇ Suitable for handling light and small workpieces with flexible contact
◇ Suitable for handling workpieces with height difference
◇ Suitable for dust-free working condition



Structure

◇ (1) Vacuum generator connection
◇ (2) Guide sleeve
◇ (3) Mounting nut
◇ (4) Guide rod
◇ (5) Suction cup connection



PSPS Series

Retractive Level Compensator

How to order

PSPS - I 10 M5F - M10

① ② ③ ④ ⑤

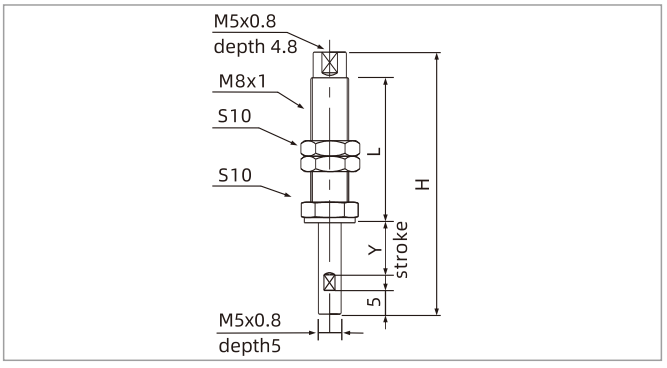
□ Series	□ Buffer style	③ Buffer stroke	□ Vacuum port connection	⑤ Mounting thread
PSPS	I - Built-in spring	10 15 20	M5F - M5×0.8 female thread	M10 - M10×1

Selection

Model/Buffer stroke	10	15	20
PSPS-I□M5F-M8	PSPS-I10M5F-M8	-	-
PSPS-I□M5F-M10	PSPS-I10M5F-M10	PSPS-I15M5F-M10	PSPS-I20M5F-M10

◇ Note: It is suggested that the actual working compressed stroke of level compensator should not exceed 50% of its max. compressed stroke

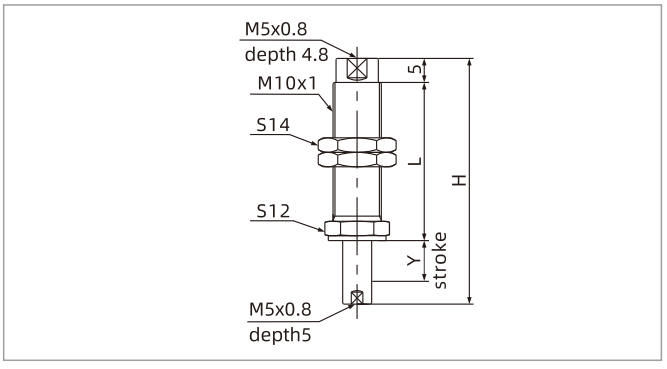
Dimensions(mm)



PSPS-I□M5F-M8

Model/Size	H	L	Y	F1 N	F2 N
PSPS-I10M5F-M8	50	27	10	0.5	0.8

◇ Note: 1. "F1"means spring force at 0 stroke, "F2" means spring force at max. stroke
2. The locking torque of M8 nut is 2.5 ~ 3.5N.M, please work within the specified torque range



PSPS-I□M5F-M10

Model/Size	H	L	Y	F1 N	F2 N
PSPS-I10M5F-M10	51	31.8	10	1.0	1.4
PSPS-I15M5F-M10	61	36.8	15	1.0	1.4
PSPS-I20M5F-M10	71	41.8	20	1.0	1.4

◇ Note: 1. "F1"means spring force at 0 stroke, "F2" means spring force at max. stroke
2. The locking torque of M10 nut is 2.5 ~ 3.5N.M, please work within the specified torque range

ZFA Series

Universal Vacuum Filter

UNIVERSAL

RoHS

Features

◇ Straight through design, one-touch fitting, with bracket, easy to mount
◇ Small size and light weight
◇ Filter elements could be replaced
◇ Suitable for vacuum and positive pressure systems with light or medium pollution level

How to order

ZFA 5 4 B
① ② ③ ④

① Series	② Filter area	③ Hose diameter	④ Bracket
ZFA	5 - Filter area 790mm²	4 - ϕ4 hose	B - Default, with bracket
	7 - Filter area 1,280mm²	6 - ϕ6 hose	
		8 - ϕ8 hose	
		10 - ϕ10 hose	
		12 - ϕ12 hose	

Selection

Model/Hose diameter 4 - ϕ4hose	6 - ϕ6hose	8 - ϕ8hose	10 - ϕ10hose	12 - ϕ12hose
ZFA54B	ZFA56B	-	-	-
-	ZFA76B	ZFA78B	ZFA710B	ZFA712B

Technical parameters

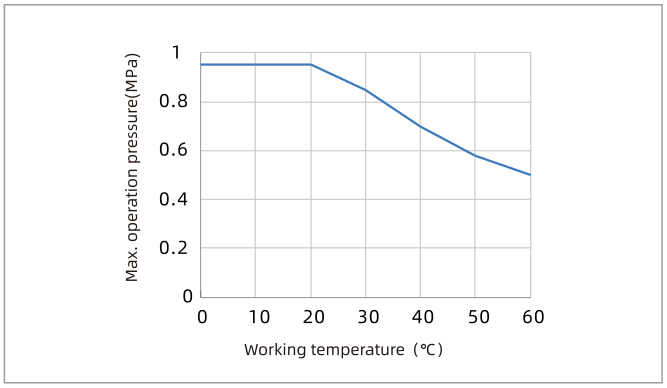
Model	Hose diameter mm	Fluid	Rated operating pressure range MPa	Max. pressure resistance MPa	Positive pressure flow NL/min	Vacuum flow NL/min	Removal efficiency μm	Operating temperature ℃	Weight g
ZFA54B	ϕ4	Air,Nitrogen	-0.1~0.8	1.0	40	10	5	0~60	14
ZFA56B	ϕ6	Air,Nitrogen	-0.1~0.8	1.0	130	75	5	0~60	13
ZFA76B	ϕ6	Air,Nitrogen	-0.1~0.8	1.0	140	80	5	0~60	24
ZFA78B	ϕ8	Air,Nitrogen	-0.1~0.8	1.0	280	110	5	0~60	24
ZFA710B	ϕ10	Air,Nitrogen	-0.1~0.8	1.0	320	120	5	0~60	30
ZFA712B	ϕ12	Air,Nitrogen	-0.1~0.8	1.0	370	140	5	0~60	31

◇ Note: Positive pressure flow is tested at air supply pressure 0.1Mpa

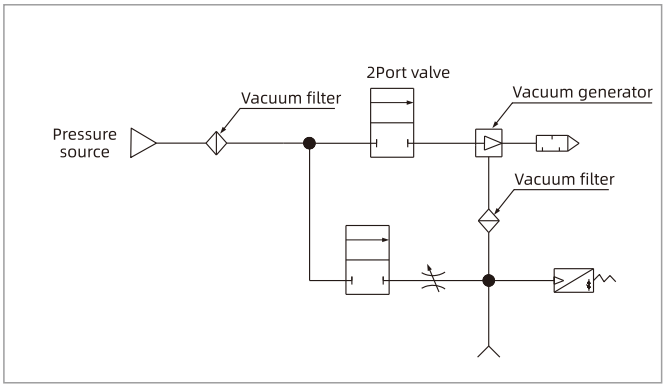
ZFA Series

Universal Vacuum Filter

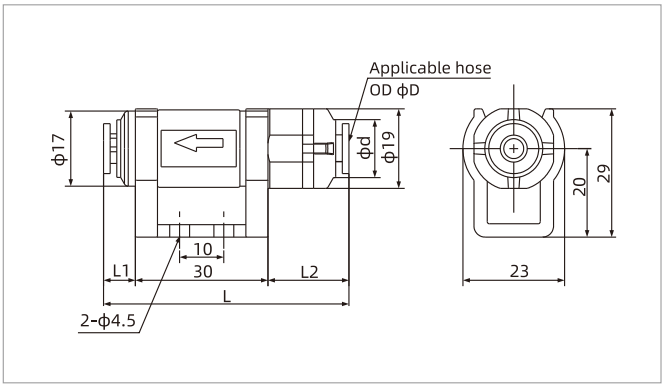
Max. operating pressure and temperature



Application diagram

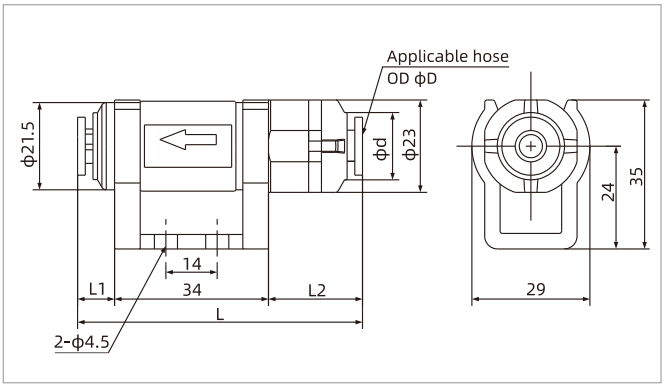


Dimensions (mm)



ZFA5□B

Model/Size	L	L1	D	d
ZFA54B	55.5	8	4	13
ZFA56B	55.5	8	6	13



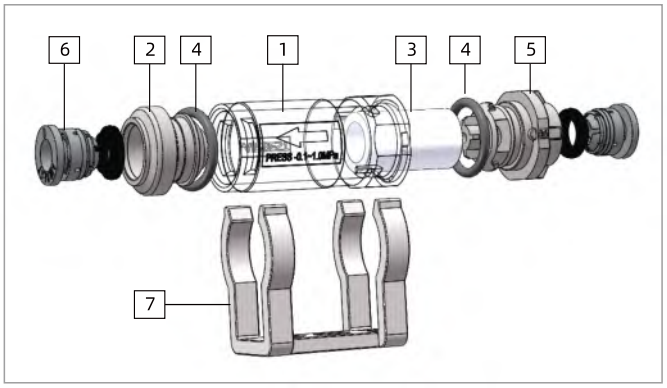
ZFA7□B

Model/Size	L	L1	D	d
ZFA76B	67	10.5	6	15.5
ZFA78B	69.5	12	8	16
ZFA710B	78.5	17	10	19.5
ZFA712B	78.5	17	12	21

ZFA Series

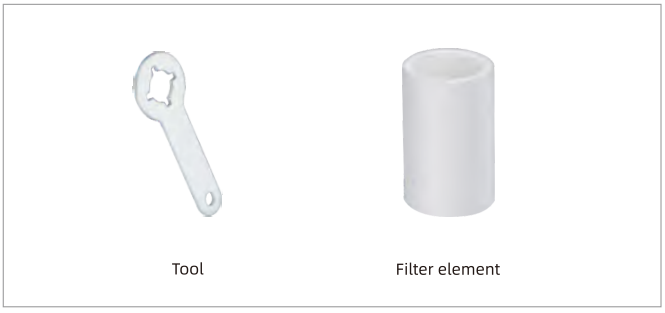
Universal Vacuum Filter

Structural diagram



NO.	Item	Material	Q'ty
1	Housing	PC	1
2	Rear cap	PBT	1
3	Filter element	PE	1
4	O-ring	NBR	2
5	Front cap	PBT	1
6	One-touch fitting	-	2
7	Bracket	PBT	1

Repair kits



Item	Model	Dimension	Applicable vacuum filter
Tool	ZFA5-SP	-	ZFA54, 56
	ZFA7-SP	-	ZFA76, 78, 710, 712
Filter element	ZFA5-FE	8×12×L20	ZFA54, 56
	ZFA7-FE	12×16×L25	ZFA76, 78, 710, 712

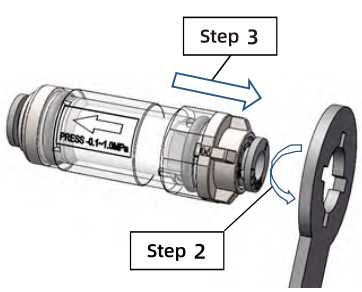
◇ Note:The minimum packing quantity of filter element is 10pcs/bag.

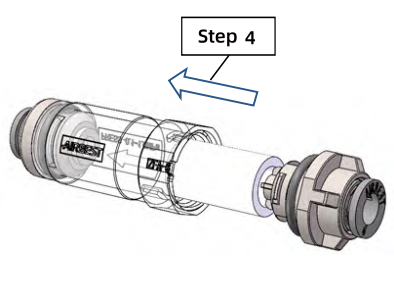
Filter element replacement

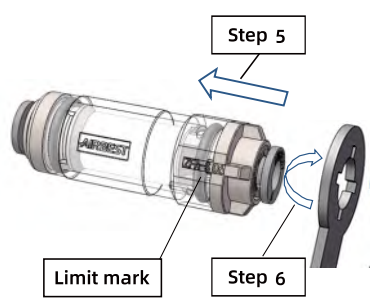
1. Stop supplying air and reduce the pressure in the vacuum filter to atmospheric pressure
2. Put tool on the front cap and turn it 90° anti-clockwise
3. Pull out the front cap, remove the filter element, and if there is dust inside the housing, clean it with an air gun(make sure that it does not damage the O-ring)
4. Install new filter element on the front cap and insert it into the housing.
5. Align the side without number of front cap at the limit mark,and push it until touching the housing
6. Rotate clockwise with the tool until it stops (align the number at the limit mark)

Cautions:

1. When connecting the hose, check the arrow indicating the flow direction. If reverse connecting, airtightness of the filter element cannot be ensured
2. In one air line, positive and negative pressure should not be used at the same time
3. Please make sure not to damage the O-ring during assembling and disassembling.And please confirm that there is no air leakage after the filter element is replaced
4. The vacuum filter and hose shall not withstand external force such as torsion, pull, load, vibration, impact, etc., and external force may cause danger at high positive pressure
5. There is anti-rotating structure at the limit mark. After replacing the filter element,please confirm the position of the limit mark
6. Please use vacuum filter at rated working pressure
7. Compressed air operation may cause danger. Therefore, filter replacement and other maintenance should be operated by a person who has sufficient knowledge and experience in air mechanics while complying with product specifications







ZFD Series

Mini Type Vacuum Filter

UNIVERSAL

Features

◇ Filter dust and other particles from the vacuum port
◇ Transparent housing, easy to check the degree of contamination
◇ Directly connect to vacuum port of vacuum generator, eg. AZR series
◇ Pipe type design, connect to hose directly
◇ Compact structure and small size, light weight, economy and environmental protection

How to order

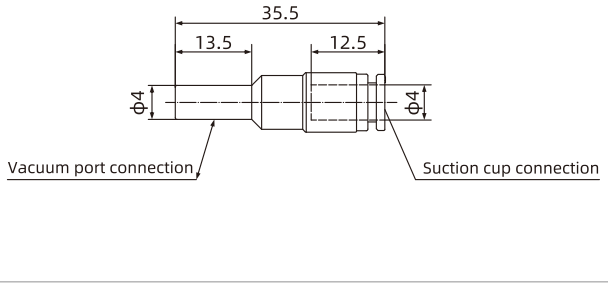
ZFD 06
① ②

① Series	② Connection specification
ZFD	04 - ϕ4hose 06 - ϕ6hose

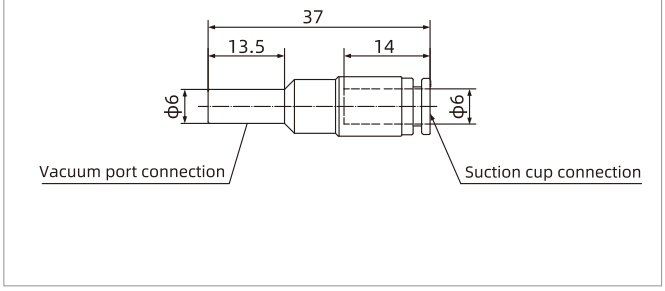
Technical parameters

Model	Rated operating pressure range kPa	Material	Nominal flow NL/min	Removal efficiency μm	Working temperature ℃	Weight g
ZFD04	-100~0	PP、PE	27	10	0~60	1.5
ZFD06	-100~0	PP、PE	49	10	0~60	2.5

Dimensions (mm)



ZFD04



ZFD06

ZFB Series

Universal Vacuum Filter

UNIVERSAL

Features

- ◇ Filter dust and other particles from the vacuum port
- ◇ Transparent housing, easy to check the degree of contamination
- ◇ Filter elements could be replaced
- ◇ Different nominal flow for option
- ◇ Suitable for vacuum system with light and medium pollution level
- ◇ Could be used for as prefilter, it can effectively filter dust with different degrees

How to order

ZFB 15 B
① ② ③

① Series	② Connection thread	③ Bracket
ZFB	10 - G3/8 female thread 15 - G1/2 female thread 20 - G3/4 female thread 25 - G1" female thread 40 - G1"1/2 female thread	B - Default, with bracket

Selection

Model/Connection thread 10 - G3/8	15 - G1/2	20 - G3/4	25 - G1"	40 - G1"1/2
ZFB10B	ZFB15B	ZFB20B	ZFB25B	ZFB40B

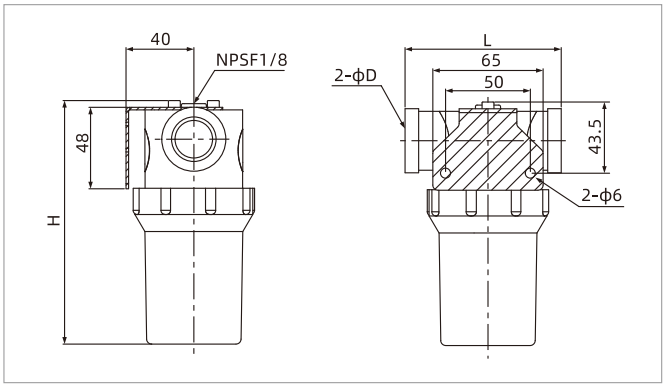
Technical parameters

Model	Rated operating pressure range kPa	Material	Nominal flow NL/min	Internal volume cm^3	Filter area m^2	Removal efficiency μm	Working temperature ℃	Weight g
ZFB10B	-100~0	PA, PC, PE	150	45	0.003	10	-20~80	70
ZFB15B	-100~0	PA, PC, PE	900	195	0.010	10	-20~80	168
ZFB20B	-100~0	PA, PC, PE	900	205	0.010	10	-20~80	170
ZFB25B	-100~0	PA, PC, PE	2,520	495	0.019	10	-20~80	424
ZFB40B	-100~0	PA, PC, PE	5,100	675	0.023	10	-20~80	550

ZFB Series

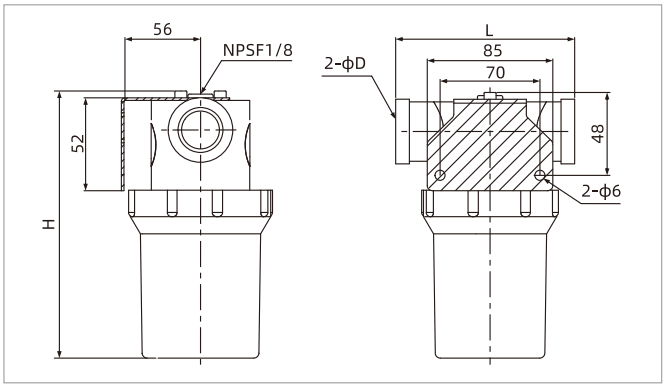
Universal Vacuum Filter

Dimensions (mm)



ZFB10(15-20)B

Model/Size	H	L	D
ZFB10B	74.5	76.5	2-G3/8
ZFB15B	134.5	91.5	2-G1/2
ZFB20B	143.5	92	2-G3/4



ZFB25B ZFB40B

Model/Size	H	L	D
ZFB25B	169.5	127	2-G1"
ZFB40B	212.5	127	2-G1"1/2

Repair kits

Filter element

Item	Model	Size	Applicable vacuum filter
Filter element	ZFB10-FE	15×26×L35	ZFB10
	ZFB20-FE	27.5×39×L90	ZFB15、20
	ZFB25-FE	45×57×L104	ZFB25
	ZFB40-FE	45×57×L136	ZFB40

◇ Note: The minimum packing quantity of filter element is 10pcs/bag

ZFP Series

Large-flow Vacuum Filter

UNIVERSAL

Features

◇ It can effectively prevent solid particles or dust from being sucked into the vacuum generator or system, reduce wear, improve operation reliability, extend the lifetime of the vacuum generator, and also effectively protect components of vacuum system (such as vacuum valve, vacuum gauge, etc.)

◇ All-steel structure, sturdy and durable, suitable for heavy load requirements of industrial use, adopts seamless tensile metal housing with copper welding joint,which has the advantages of high air tightness, large space for dirt, easy cleaning, easy replacement of filter element, and quick inlet and outlet with threaded connection

◇ Various nominal flow rates for option

How to order

ZFP 30
① ②

① Series	② Nominal flow
ZFP	30 - 32m³/h
	40 - 42m³/h
	100 - 100m³/h
	120 - 120m³/h
	300 - 300m³/h

Selection

Model/Nominal flow 30 - 32m³/h	40 - 42m³/h	100 - 100m³/h	120 - 120m³/h	300 - 300m³/h
ZFP30	ZFP40	ZFP100	ZFP120	ZFP300

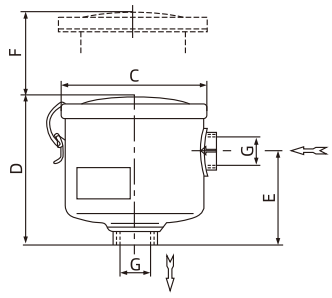
Technical parameters

Model	Rated operating pressure range kPa	Body material	Nominal flow m³/h	Internal volume cm³	Filter area cm²	Removal efficiency μm	Working temperature ℃	Weight kg
ZFP30	-100~0	Steel	32	45	30	10	-15~90	1
ZFP40	-100~0	Steel	42	195	100	10	-15~90	1
ZFP100	-100~0	Steel	100	205	100	10	-15~90	1.4
ZFP120	-100~0	Steel	120	495	190	10	-15~90	2.3
ZFP300	-100~0	Steel	300	675	230	10	-15~90	6.9

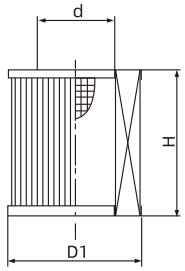
ZFP Series

Large-flow Vacuum Filter

Dimensions (mm)



Filter



Filter element

Model/Size	G	C	D	E	F	D1	d	H
ZFP30	G1/2	101	90	53	70	65	38	69
ZFP40	G3/4	101	90	53	70	65	38	69
ZFP100	G1"1/4	146	110	70	75	98	60	70
ZFP120	G1"1/4	185	170	115	130	128	64	125
ZFP300	G2"	222	258	125	140	150	88	222

ZFP

Repair kits

Filter element

Item	Model	Applicable vacuum filter
Filter element	ZFP30-FE	ZFP30、40
	ZFP100-FE	ZFP100
	ZFP120-FE	ZFP120
	ZFP300-FE	ZFP300

ZVR Series

Check Valve

UNIVERSAL

Features

◇ In the process of grabbing the workpiece, it will not affect the whole vacuum system once suction cups failed to adsorb the workpiece or the workpiece falls off suddenly after adsorption

◇ In the above case, the suction cups are isolated from vacuum system to make sure that the vacuum level and vacuum flow in the whole vacuum system are maintained. It is specific for repeatedly gripping workpieces with various sizes and shapes in a vacuum system

How to order

ZVR 05 - G1M
① ② ③

① Series	② Overflow port diameter	③ Suction cup connection thread	
ZVR	04 - ϕ0.4mm	M5M - M5×0.8 male thread	M5F - M5×0.8 female thread
	05 - ϕ0.5mm	G1M - G1/8 male thread	G1F - G1/8 female thread
	06 - ϕ0.6mm	G2M - G1/4 male thread	G2F - G1/4 female thread
	10 - ϕ1.0mm	G3M - G3/8 male thread	G3F - G3/8 female thread
	12 - ϕ1.2mm	G4M - G1/2 male thread	G4F - G1/2 female thread

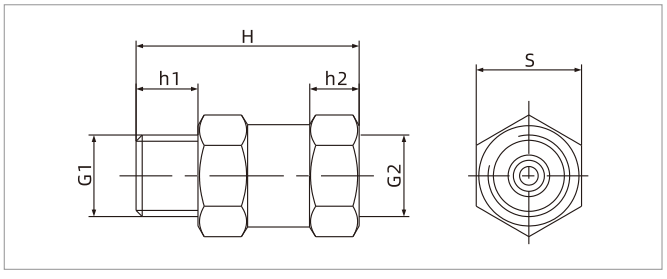
Selection

Model/ Connection thread M - Male thread	F - Female thread
ZVR04-M5M	ZVR04-M5F
ZVR05-G1M	ZVR05-G1F
ZVR06-G2M	ZVR06-G2F
ZVR10-G3M	ZVR10-G3F
ZVR12-G4M	ZVR12-G4F

Technical parameters

Model	Suction flow NL/min(-30kPa)	Suction flow NL/min(-60kPa)	Max. blow flow NL/min	Weight g
ZVR04-M5☐	1.2	1.3	80	2
ZVR05-G1☐	2.3	2.5	310	8.3
ZVR06-G2☐	2.9	3.4	340	15.6
ZVR10-G3☐	7.3	8	590	28.6
ZVR12-G4☐	8.1	9	790	46

Dimensions (mm)



ZVR

Model/Size	H	G1	h1	G2	h2	S
ZVR04-M5☐	20	M5×0.8	4.5	M5×0.8	5	8
ZVR05-G1☐	28	G1/8	8	G1/8	6	14
ZVR06-G2☐	36	G1/4	10	G1/4	8	17
ZVR10-G3☐	39	G3/8	10	G3/8	8	22
ZVR12-G4☐	41	G1/2	12	G1/2	9	27

ZVRM Series

Check Valve

UNIVERSAL

Features

◇ Effectively avoid the influence to the whole vacuum system when the suction cup failed to adsorb the workpiece

◇ In the same vacuum system, workpieces of different sizes can be repeatedly grasped

◇ Spring type check valve helps to prevent workpiece from dropping in turnover movement

How to order

ZVRM 07 - M5M

① ② ③

① Series	② Overflow port diameter	③ Suction cup connection thread
ZVRM	03 - ϕ0.3mm	M5M - M5×0.8 male thread
	05 - ϕ0.5mm	G1M - G1/8 male thread
	07 - ϕ0.7mm	
	10 - ϕ1.0mm	

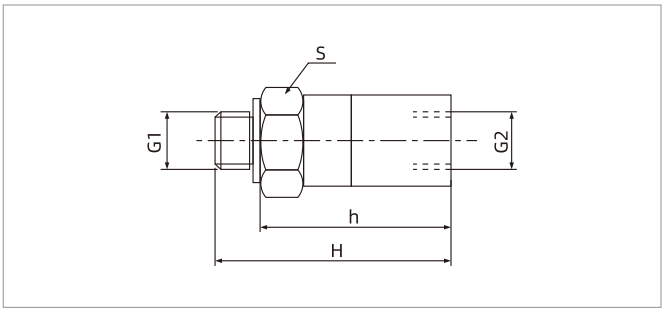
Selection

Model/Thread M5M	G1M
ZVRM03-M5M	-
ZVRM05-M5M	ZVRM05-G1M
ZVRM07-M5M	ZVRM07-G1M
-	ZVRM10-G1M

Technical parameters

Model	Overflow port diameter mm	Valve core works Effective cross-sectional area mm²	Valve core doesn't work Effective cross-sectional area mm²	Fluid	Max. pressure range kPa	Removal efficiency μm	Minimum action flow NL/min	Weight g
ZVRM03-M5M	0.3	0.07	1.64	Air	-100~0	40	2	6
ZVRM05-M5M	0.5	0.19	1.76	Air	-100~0	40	4	6
ZVRM07-M5M	0.7	0.38	1.95	Air	-100~0	40	5.5	6
ZVRM05-G1M	0.5	0.19	1.76	Air	-100~0	40	5	22
ZVRM07-G1M	0.7	0.38	2.64	Air	-100~0	40	8	22
ZVRM10-G1M	1.0	0.78	3.04	Air	-100~0	40	16	22

Dimensions (mm)



ZVRM

Model/Size	H	h	G1	G2	S
ZVRM03-M5M	20	16	M5×0.8depth3.5	M5×0.8depth6	8
ZVRM05-M5M	20	16	M5×0.8depth3.5	M5×0.8depth6	8
ZVRM07-M5M	20	16	M5×0.8depth3.5	M5×0.8depth6	8
ZVRM05-G1M	28.5	23	G1/8depth5	G1/8depth8.5	13
ZVRM07-G1M	28.5	23	G1/8depth5	G1/8depth8.5	13
ZVRM10-G1M	28.5	23	G1/8depth5	G1/8depth8.5	13

ZPDE Series

High-precision Digital Pressure Switch

UNIVERSAL

Features

◇ Digital display electronic pressure switch,optional two-color display
◇ 4-digit seven-segment LED display
◇ Pressure units can be converted and displayed on the screen
◇ Parameter values can be displayed directly on the screen

Advantages

◇ Monitor the system action clearly and visually, could change the setting content and backlight display mode
◇ The pressure is displayed on the screen, easy to read
◇ Easy to operate with the clear display

Application

◇ Monitor the vacuum system, optimize the working cycle
◇ Adjust the system circuit, improve economic benefit of vacuum system
◇ Square shape is more suitable for installing panel
◇ Suitable for all automation handling industries

Structure

◇ Electronic vacuum switch, solid polycarbonate case
◇ 2m connecting cable
◇ Optional mounting bracket and panel type mounting frame

How to order

ZPDE - C N - R1M
① ② ③ ④

① Series	② Pressure range	③ Output specification	④ Connection thread
ZPDE	C - Compound P - Positive	N - 1NPN output P - 1PNP output	R1M - Rc1/8 male thread

Selection

Model	
ZPDE-CN-R1M	ZPDE-PN-R1M
ZPDE-CP-R1M	ZPDE-PP-R1M

ZPDE Series

High-precision Digital Pressure Switch

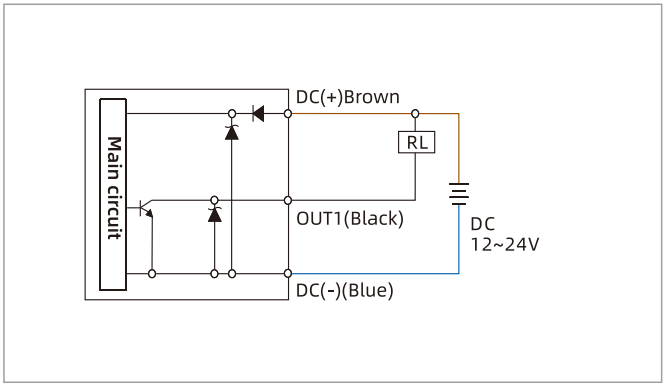
Technical parameters

Model		ZPDE-C（Compound）	ZPDE-P（Positive）
Rated pressure range		-100.0~100.0kPa	-0.100~1.000MPa
Setting pressure range		-103.0~103.0kPa	-0.103~1.030MPa
Withstand pressure		500kPa	1.5MPa
Fluid		Air, Non-corrosive gas/Non-flammable gas	Air, Non-corrosive gas/Non-flammable gas
Pressure unit	kPa	0.1	1
Set pressure resolution	MPa	-	-
	kgf/cm^2	0.001	0.01
	bar	0.001	0.01
	psi	0.01	0.1
	inHg	0.1	-
	mmHg	1	-
Power supply voltage		12to24V DC±10%,ripple(P-P)10% or less	
Current consumption		≦30mA（Without load）	
Switch output	Output type	Open collector (NPN) / Close collector (PNP)	
	Load current	Max.125mA	
	Residual voltage	≦1.0V	
	Response time	≦2.5ms(Chattering-proof function:25ms,100ms,250mm,500mm,1000mm,1500ms selectable)	
Display	Display	White（Sampling rate:0.2 time/sec,0.5 time/sec,1 time/sec for choice）	
	Indicator accuracy	±1%F.S.±1 digit（ambient temperature:25±3℃）	
	Repeatability	±0.3%F.S.±1 digit	
	Switch ON Indicator	White (1 indicator) OUT1	
Environment	Enclosure	IP40	
	Ambient temp. range	0~50℃	
	Temperature characteristic	±2% F.S.of rated ambient temperature 25℃ (at temp. range of 0~50℃)	
	Storage temperature	Storage:-10-60℃ (No condensation or freezing)	
	Ambient humidity	Operation/ storage:35-85%RH (No condensation)	
	Withstand voltage	1000V AC in 1-min（between case and lead wire）	
	Insulation resistance	50MΩ above（500V DC）(between case and lead wire)	
	Vibration	Total amplitude 1.5mm Or 10G,10Hz~150Hz~10Hz for 1 minute,two hours each direction of X,Y and Z	
	Shock	$100m/s^2$ (10G)3 times each in direction of X,Y and Z	
Port size		Rc1/8, M5	
Lead wire		ϕ4 oil-resistance PVC cable- 3 core	
Weight		67g(with 2-meter lead wire)	

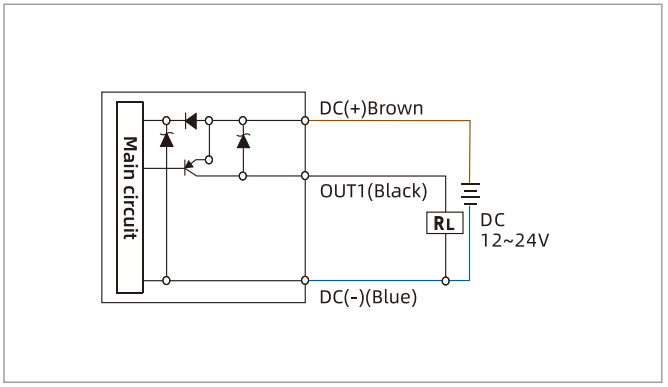
ZPDE Series

High-precision Digital Pressure Switch

Output circuit wiring diagrams

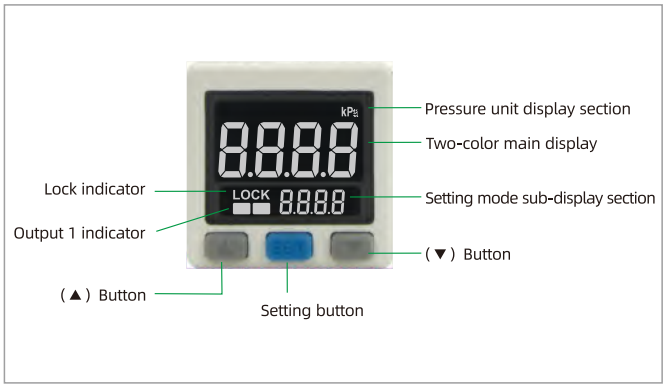


ZPDE-□N-R1M 1NPN output

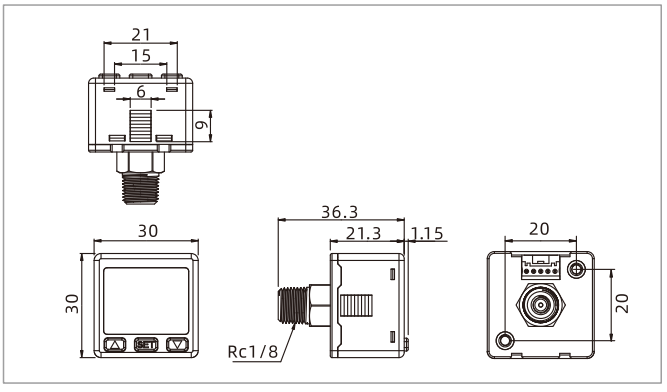


ZPDE-□P-R1M 1PNP output

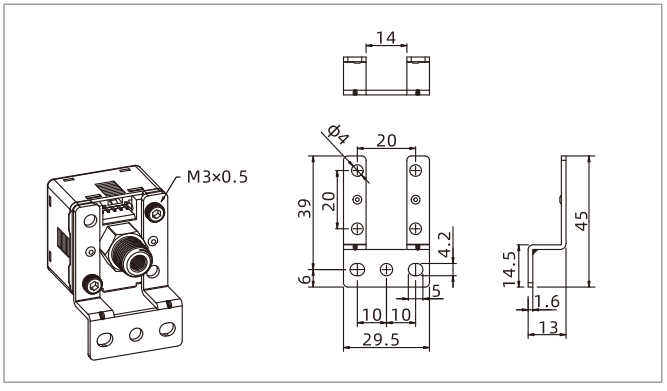
Panel instructions



Dimensions (mm)

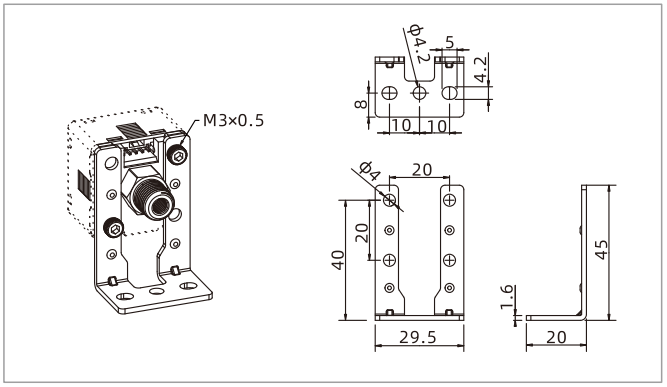


ZPDE-□N-R1M

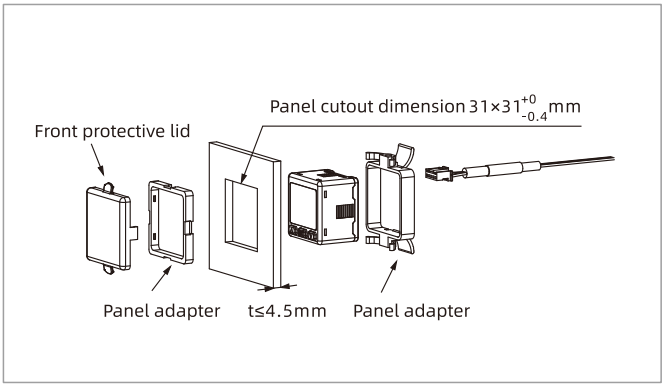


ZPDT-A-MB Mounting bracket A type

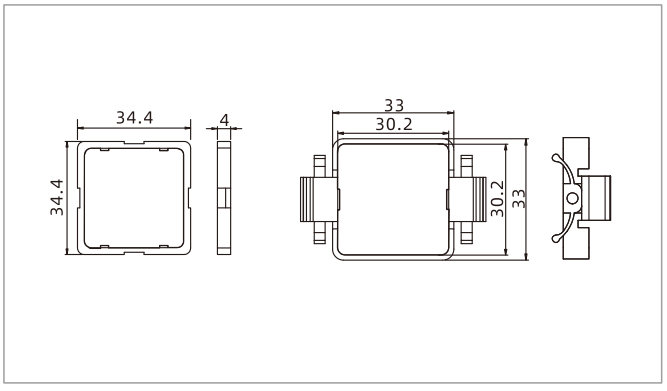
Dimensions (mm)



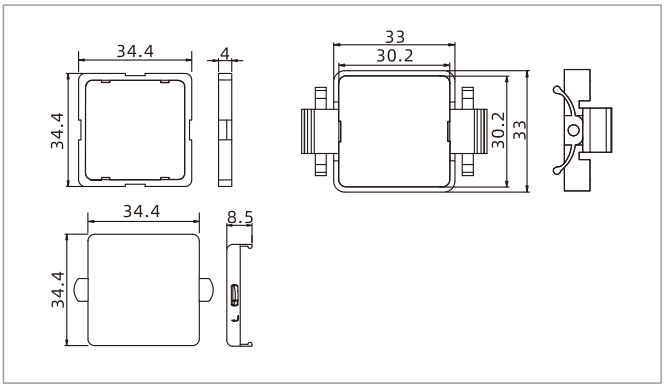
ZPDT-B-MB Mounting bracket B type



Panel type



ZPDT-PS Panel adapter



ZPDT-PC Front protective lid + panel adapter

Accessories

Item	Model
Mounting bracket A type	ZPDT-A-MB
Mounting bracket B type	ZPDT-B-MB
Panel adapter	ZPDT-PS
Front protective lid + panel adapter	ZPDT-PC

ZPDT Series

High-precision Digital Pressure Switch

UNIVERSAL

Features

◇ Digital display electronic pressure switch, optional two-color display
◇ 4-digit seven-segment LED display
◇ Pressure units can be converted and displayed on the screen
◇ Parameter values can be displayed directly on the screen

Advantages

◇ Monitor the system action clearly and visually, could change the setting content and backlight display mode
◇ The pressure is displayed on the screen, easy to read
◇ Mian and sub display can set parameter directly, setting steps could be reduced by 3/4
◇ Easy to operate with the clear display

Application

◇ Monitor the vacuum system, optimize the working cycle
◇ Adjust the system circuit, improve economic benefit of vacuum system
◇ Square shape is more suitable for installing panel
◇ Suitable for all automation handling industries

Structure

◇ Electronic vacuum switch, solid polycarbonate case
◇ Vacuum connection is Rc1/8 Male thread
◇ 2m connecting cable
◇ Optional mounting bracket and panel type mounting frame

How to order

ZPDT - C NV - R1M
① ② ③ ④

① Series	② Pressure range	③ Output specification	④ Connection thread
ZPDT	C - Compound	NV - 1NPN+1 Analog(Voltage) output (1-5V)	R1M - Rc1/8 male thread
	P - Positive	PV - 1PNP+1 Analog(Voltage) output(1-5V)	

Selection

Model Nil			
ZPDT-CNV-R1M	ZPDT-CPV-R1M	ZPDT-PNV-R1M	ZPDT-PPV-R1M

ZPDT Series

High-precision Digital Pressure Switch

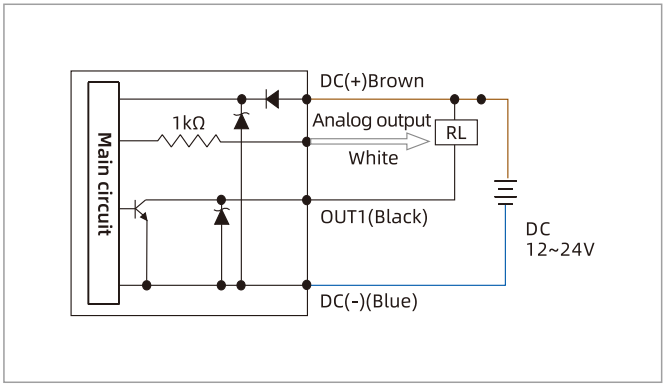
Technical parameters

Model		ZPDT-C（Compound）	ZPDT-P（Positive）
Rated pressure range		-100.0~100.0kPa	-0.100~1.000MPa
Setting pressure range		-103.0~103.0kPa	-0.103~1.030MPa
Withstand pressure		500kPa	1.5MPa
Fluid		Air, Non-corrosive gas/Non-flammable gas	Air, Non-corrosive gas/Non-flammable gas
Pressure unit	kPa	0.1	-
Set pressure resolution	MPa	-	0.001
	kgf/cm²	0.001	0.01
	bar	0.001	0.01
	psi	0.01	0.1
	inHg	0.1	-
	mmHg	1	-
Power supply voltage		12 to 24V DC±10%，ripple(P-P)10% or less	
Current consumption		≦40mA (Without load)	
Switch output	Output type	Open collector (NPN or PNP)	
	load current	Max.125mA	
	Residual voltage	≦1.0V	
	Response time	≦2.5ms (Chattering-proof function: 25ms,100ms,250mm, 500mm, 1000mm, 1500ms selectable)	
Analog output	Output Voltage	1-5V ±2.5%F.S (within rated pressure range)	0.6-5V ±2.5%F.S (within rated pressure range)
	Output impedance	1kΩ	
	Linearity	±1% F.S.	
Display	Display	Three colors (Red/ Green/ Orange)display(sampling rate:5 times/sec,2 times/sec,1 time/sec for choice.)	
	Indicator accuracy	±1%F.S.±1 digit (ambient temperature：25±3℃)	
	Repeatability	±0.3%F.S.±1 digit	
	Switch ON indicator	Orange (1 indicator)OUT1	
Environment	Enclosure	IP40	
	Ambient temp.range	0~50℃	
	Temperature characteristic	±3% F.S.of rated ambient temperature 25℃ (at temp. range of 0~50℃)	
	Storage temperature	Storage：-10-60℃ (No condensation or freezing)	
	Ambient humidity	Operation/ storage:35-85%HR (No condensation)	
	Withstand voltage	1000VAC in 1-min (between case and lead wire)	
	Insulation resistance	50MΩ min (500V DC) (between case and lead wire)	
	Vibration	Total amplitude 1.5mm Or 10G, 10Hz~150Hz~10Hz for 1 minute, two hours each direction of X, Y and Z	
	Shock	100m/s² (10G) 3 times each in direction of X, Y and Z	
Port size		Rc1/8, M5	
Lead wire		Oil-resistance cable (0.15mm²)	
Weight		67g (with 2-meter lead wire)	

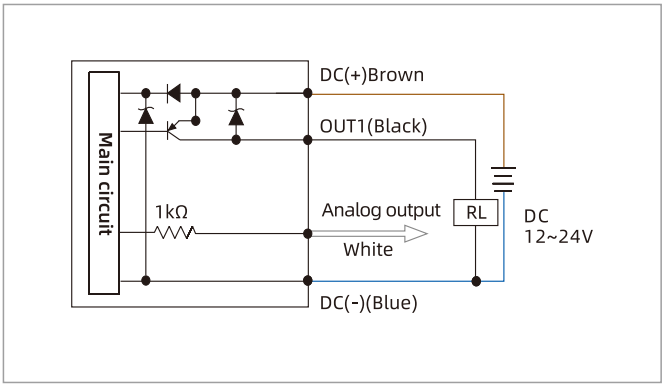
ZPDT Series

High-precision Digital Pressure Switch

Output circuit wiring diagrams

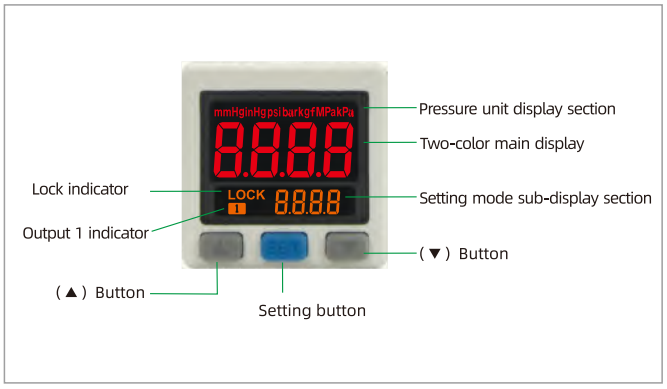


ZPDT-□NV-R1M 1NPN+Analog voltage output（1-5V）

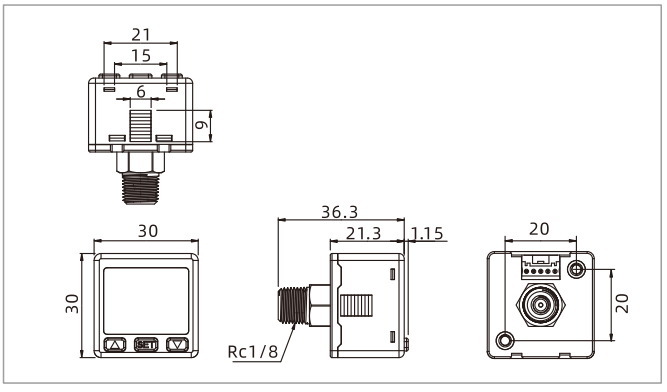


ZPDT-□PV-R1M 1PNP+Analog voltage output（1-5V）

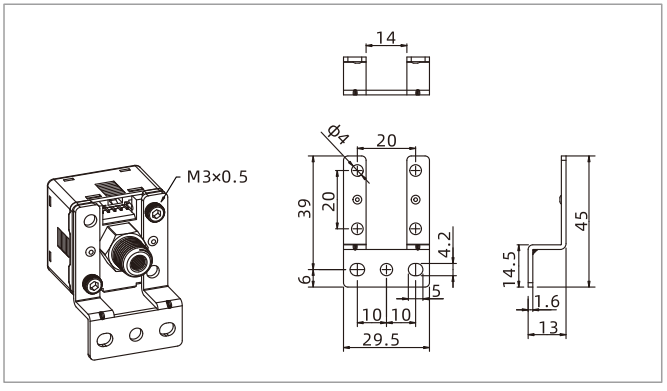
Panel instructions



Dimensions(mm)



ZPDT-□□-R1M

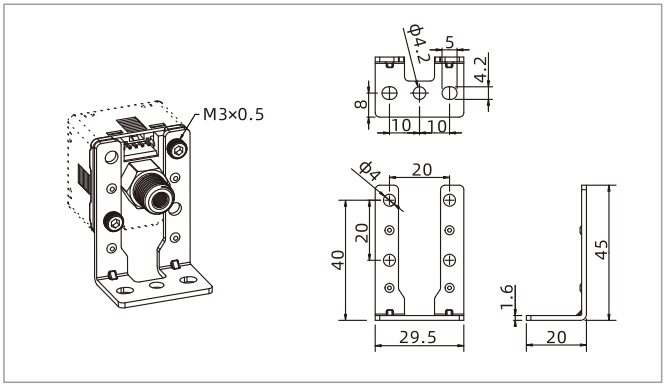


ZPDT-A-MB Mounting bracket A type

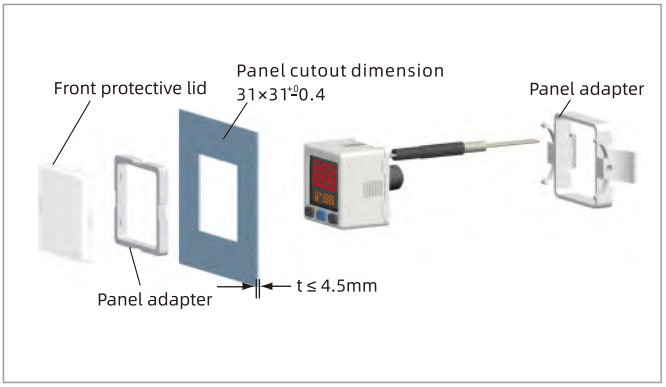
ZPDT Series

High-precision Digital Pressure Switch

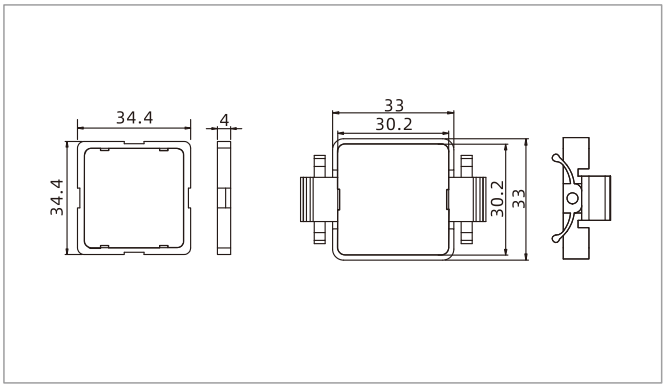
Dimensions (mm)



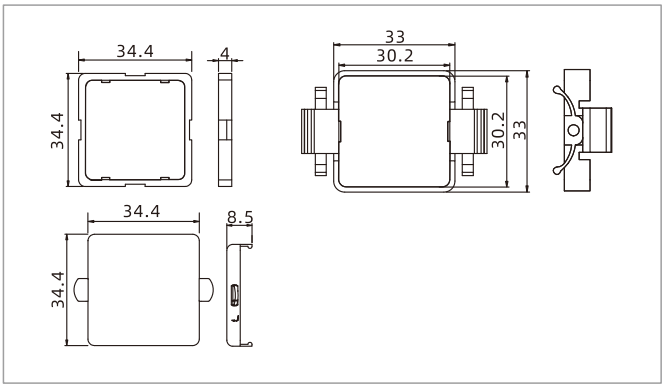
ZPDT-B-MB Mounting bracket B type



Panel type



ZPDT-PS Panel adapter



ZPDT-PC Front protective lid + panel adapter

Accessories

Item	Model
Mounting bracket A type	ZPDT-A-MB
Mounting bracket B type	ZPDT-B-MB
Panel adapter	ZPDT-PS
Front protective lid + panel adapter	ZPDT-PC

ZPMR Series

Mechanical Pressure Gauge

UNIVERSAL

Features

◇ Mechanical pressure gauge, panel is made of acrylic, and ABS black plastic for housing

◇ Back entry type mounting,universal specifications, easy to use

How to order

ZPMR - P

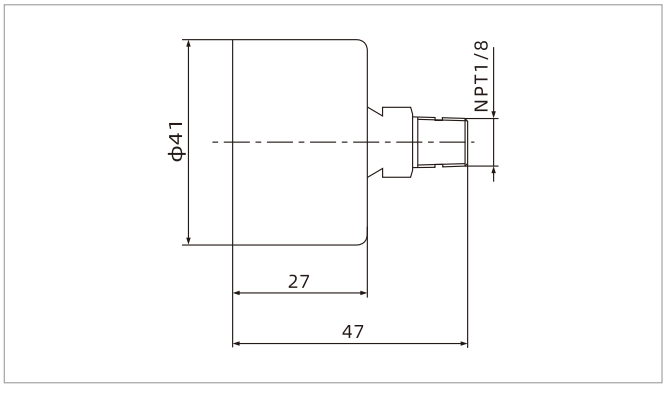
① ②

① Series	② Pressure type	Connection thread
ZPMR	P - Positive	NPT1/8 male thread
	V - Negative	G1/8 male thread

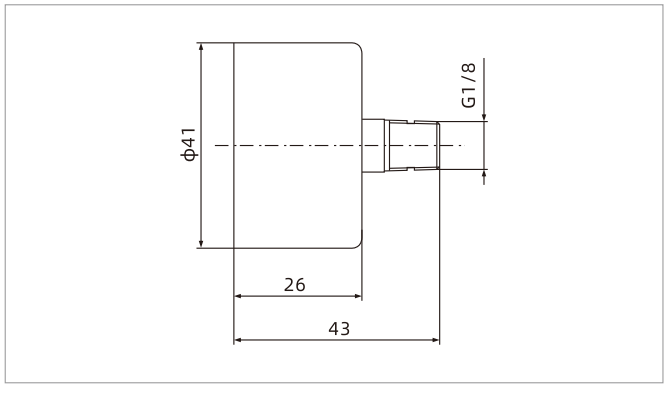
Technical parameters

Model	Pressure range	Dial size	Material of connector	Connection thread	Weight g
ZPMR-P	0~1MPa	1.5 inch	Copper alloy	NPT1/8	63.5
ZPMR-V	-100~0kPa	1.5 inch	Copper alloy	G1/8	57

Dimensions (mm)



ZPMR-P



ZPMR-V