

KMC22 series



Features

- Light and compact - 20mm width, compact solenoid valve.
- Vacuum pressure and nozzle sizes choice available
Energy savings with MVS-201 sensor
Nozzle choice: Ø0.5, Ø0.7 and Ø1.0
- Manifold option - Up to 8 units

How to order

KMC22 S 05 H S ABS LC 4 B L R 3 1 2 L

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭

① Body type

S	Single unit
M	Manifold unit

② Nozzle size

05	Ø0.5
07	Ø0.7
10	Ø1.0

③ Maximum vacuum pressure

H	-87kPa
L	-53kPa

④ Supply pressure

S	0.5MPa
R	0.35MPa

Note) ②③④ applicable models

②	③	④	
		S	R
05	H	O	O
	L	O	X
07	H	O	O
	L	O	X
10	H	O	O
	L	X	X

⑤ Pressure sensor

	Sensor type	Pressure	Display	Switch output	Analog output	Input specification
ABS	MVS-030AB	Vacuum	LED	NPN1 point	Without	Without
ABP	MVS-030AB	Vacuum	LED	PNP1 point	Without	Without
VG	MPS-V23	Vacuum	Digital	NPN2 point	DC1~5V	Without
VGP	MPS-V23	Vacuum	Digital	PNP2 point	DC1~5V	Without
21	MVS-201	Compound	Digital	NPN1 point	Without	Sink
21P	MVS-201	Compound	Digital	PNP1 point	Without	Sink
Z	Without	-	-	-	-	-

⑥ Check valve

L	Without check valve
LC	With check valve

⑦ Solenoid valve voltage

4	DC24V
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⑧ Solenoid valve function

A	Nomally open (N.O)
B	Nomally close (N.C)
W	Self-holding solenoid valve ^{note)1}

Note 1) The energy-saving function of a sensor cannot work if the self-holding valve is selected.

⑨ Solenoid valve connection

L	Connector type lamp and surge killer
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⑩ Port thread

R	Rc(PT) 1/8"(standard)
N	NPT 1/8"
G	G 1/8"

⑪ Number of manifold units

Nil	①: Single type		
1	1 unit	5	5 units
2	2 units	6	6 units
3	3 units	7	7 units
4	4 units	8	8 units

⑫ Number of block plates

Nil	①: Single type		
0	None	4	4 units
1	1 units	5	5 units
2	2 units	6	6 units
3	3 units	7	7 units

⑬ Number of bodies

Nil	①: Single type		
1	1 unit	5	5 units
2	2 units	6	6 units
3	3 units	7	7 units
4	4 units	8	8 units

⑭ Position of body

R	Placed to the right
L	Placed to the left
Nil	①: Single type When ⑪ & ⑬ are same

※ Please turn the vacuum port towards your side, the unit body you faced could be either left or right upon chosen

Maintenance parts

- Solenoid valve (with gasket and mounting screws)

- Solenoid valve common for vacuum and blow-off

CKV010-4E

※ DC24V, Only connect type.

※ Please contact us for detailed specifications.

- Self-holding solenoid valve (with gasket and mounting screws)

LV290-4E

※ Please contact us for detailed specifications.

- Pressure switch (with O ring, setting screws)

MVS-030AB-MC22

MVS-030ABP-MC22

MPS-V23C-NGA-MC22

MPS-V23C-PGA-MC22

MC22-C201(Normally open, Normally close)

MC22-C201-W(Self-holding)

MVS-201P-MC22(Normally close)

MVS-201P-MC22-W(Self-holding)

※ Please contact us for detailed specifications.

- Sensor plug

KMC2-Z

- Manifold base

KMC2 - M - 1 R

① ②

① Number of manifold units

1	1 unit	5	5 units
2	2 units	6	6 units
3	3 units	7	7 units
4	4 units	8	8 units

※ With mounting screw and plugs

② Air supply port thread

R	Rc(PT) 1/8(standard)
N	NPT 1/8
G	G 1/8

- Filter

KMC2 - E

①

① Parts

E	Element
F	Filter kit (with element)

- Silencer (with mounting bracket)

KMC2-S

- Block plate for manifold (with setting screws)

KMC2-MM

- Mounting bracket for unit type (with setting screws)

KMC2-B

Specifications

Model		KMC22□-05			KMC22□-07			KMC22□-10	
		HS	LS	HR	HS	LS	HR	HS	HR
Fluid		Non-lubricated air / Non-corrosive gas							
Ambient temperature		0 ~ 50℃ (without freezing)							
Operating pressure range		0.2 ~ 0.5MPa							
Blow-off flow		50ℓ/min(ANR)							
Solenoid valve function		Normally closed, Normally open, Self-holding							
Filter element filtration		37 _μ m							
Nozzle size		Ø0.5			Ø0.7			Ø1.0	
Nominal pressure		0.5MPa		0.35MPa	0.5MPa		0.35MPa	0.5MPa	0.35MPa
Vacuum (air) flow ℓ/min(ANR)		6	11	4	11	21	9	20	15
Max. vacuum pressure		-87kPa	-53kPa	-87kPa	-87kPa	-53kPa	-87kPa	-87kPa	-87kPa
Air consumption		10ℓ/min(ANR)			22.5ℓ/min(ANR)			48ℓ/min(ANR)	
Mass	L/LC single type	117g							

Solenoid valve specifications

	CKV010-4E	LV290-4E
Solenoid valve function	Normally closed (N.C.), Normally open (N.O)	Self-holding
Operating voltage	DC24V	
Allowable voltage tolerance	±10%	
Power consumption	1W	1.3W / 1.5W
Grade of insulation	B class	
Manual override operation	Non-lock push button	
Display - Surge killer	LED-diode	
Cable	Lead wire with connector (300mm)	

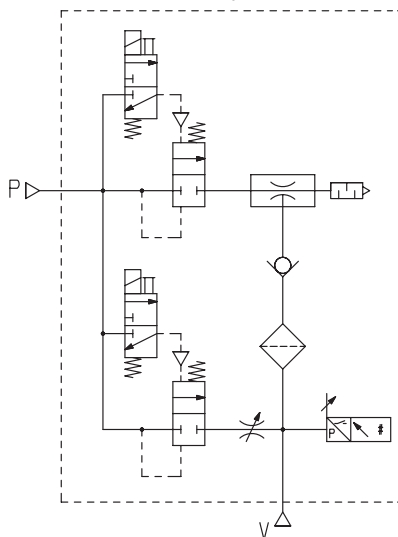
Pressure sensor specifications

	MVS-030	MPS-V23	MVS-201
Fluid	Non-lubricated air/non-corrosive gas		
Pressure range settings	-10 ~ -101kPa	0 ~ -101kPa	50 ~ -101kPa
Ambient temperature	0 ~ 50°C (without freezing)		
Output type	Switch output	Switch output Analog output	Switch output / input
Display	LED	Digital	Digital
Operating voltage	DC12 ~ 24V		DC10.8 ~ 30V

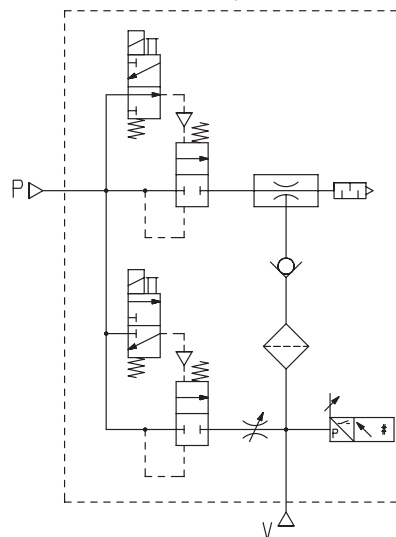
※ Air flow condition of MVS-201 sensor is set as normally open (N.O.).
For normally closed (N.C.), please check the manual and change the settings manually

Symbol

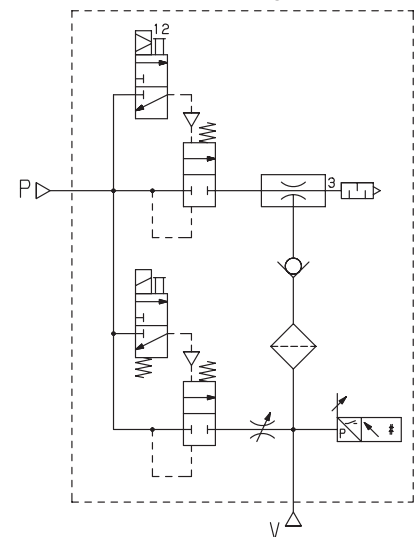
KMC22 Normally closed



KMC22 Normally open

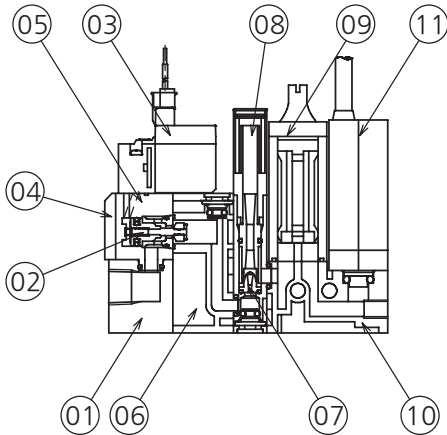


KMC22 Self-holding



※ With sensor, with check valve

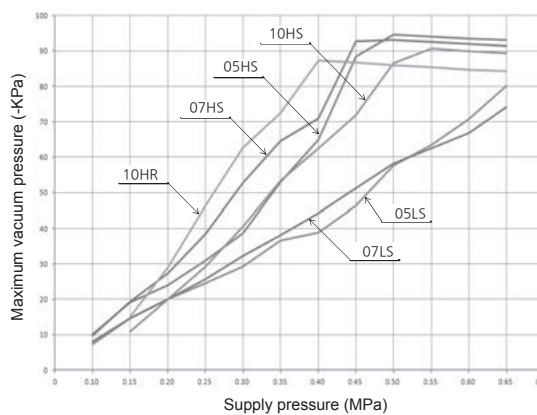
Construction



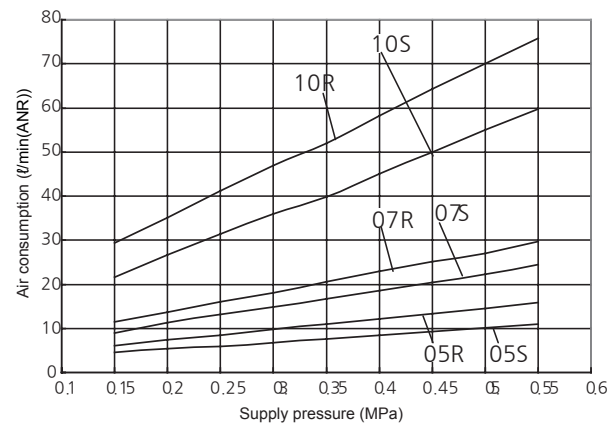
NO	Part name	Material
1	Air supply base	Aluminium
2	Poppet valve	Aluminium, NBR, SUS, FKM
3	Solenoid valve	-
4	Cover	Aluminium
5	Valve block	PA, NBR
6	Spacer block	PA, NBR
7	Nozzle kit	Aluminium, NBR
8	Silencer	SUS, PA, PVF
9	Filter assembly	-
10	Vacuum port	PA, Aluminium, NBR
11	Pressure sensor	-

Performance charts

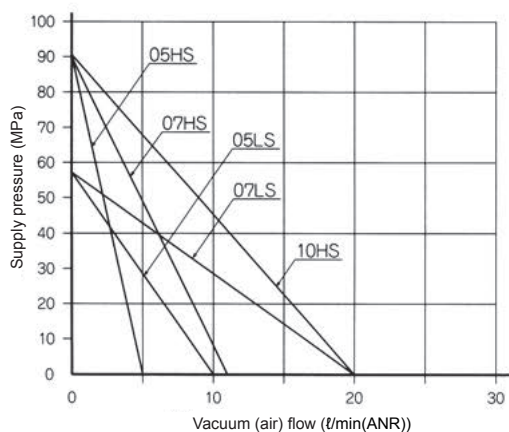
Maximum vacuum pressure characteristic



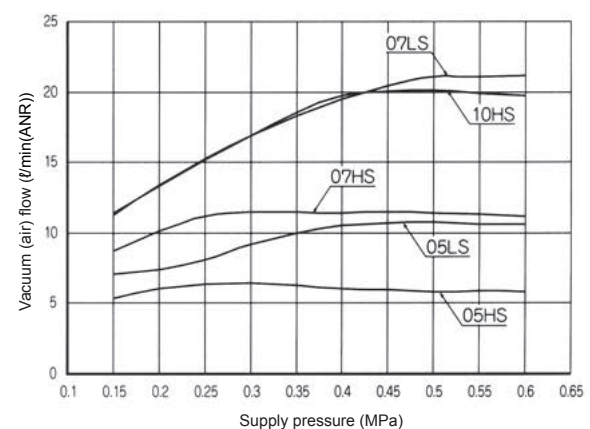
Air consumption characteristics



Vacuum (air) flow - vacuum pressure characteristic



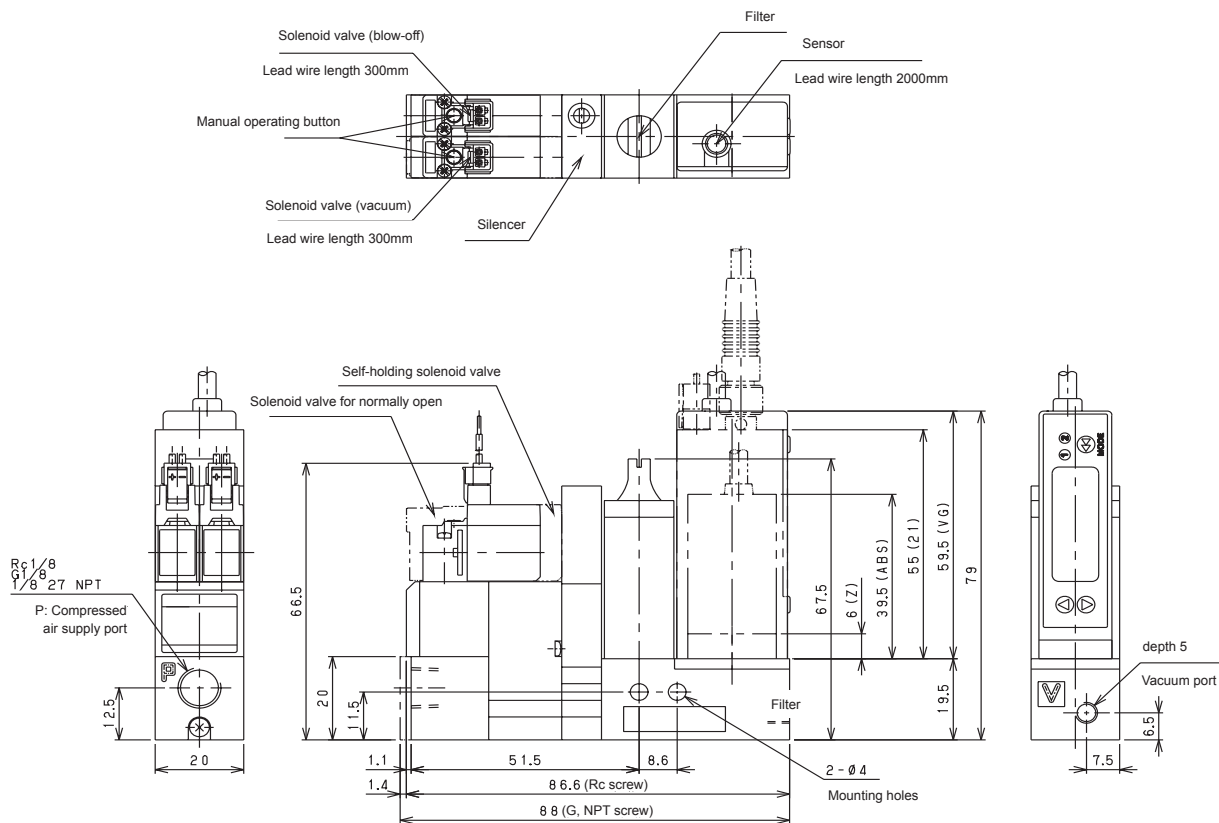
Maximum vacuum (air) flow characteristic



Dimensions

Single unit type

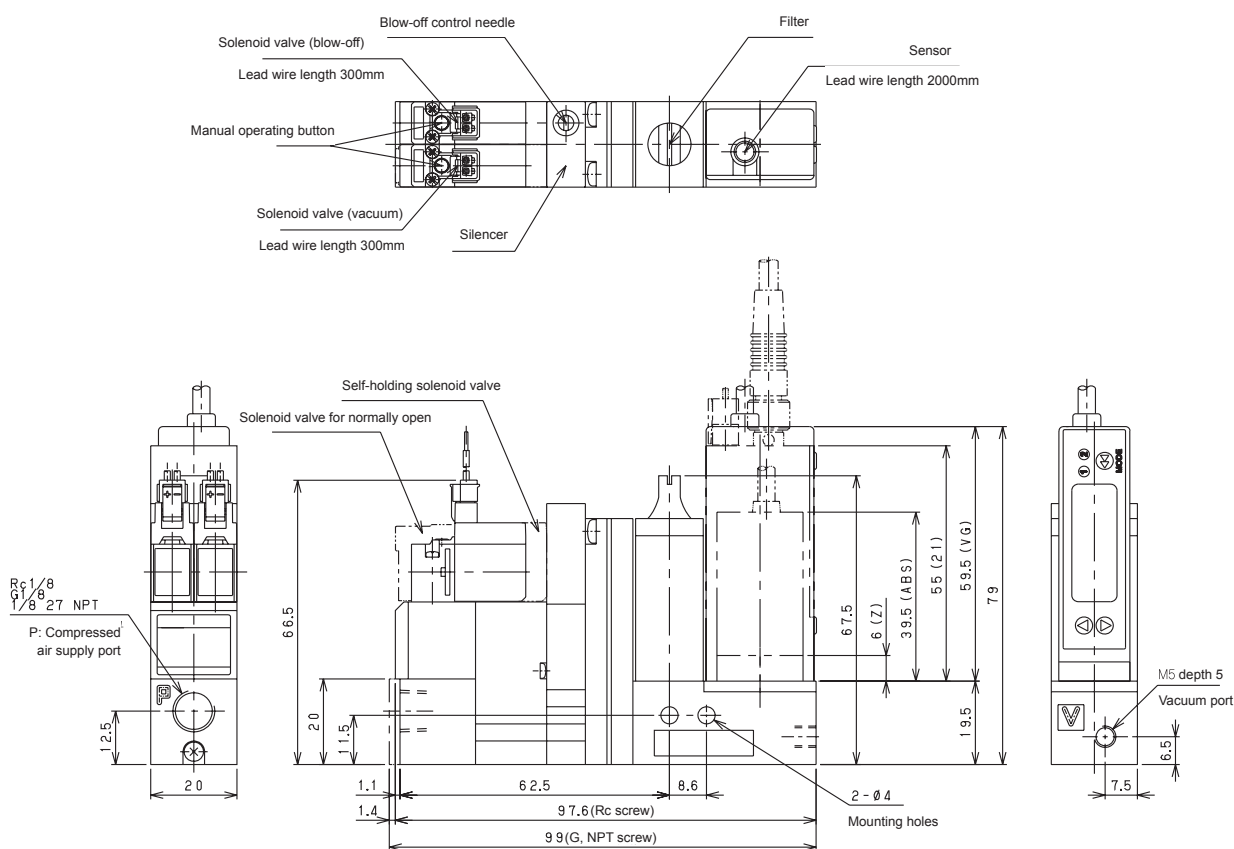
Without check valve



Dimensions

Single unit type

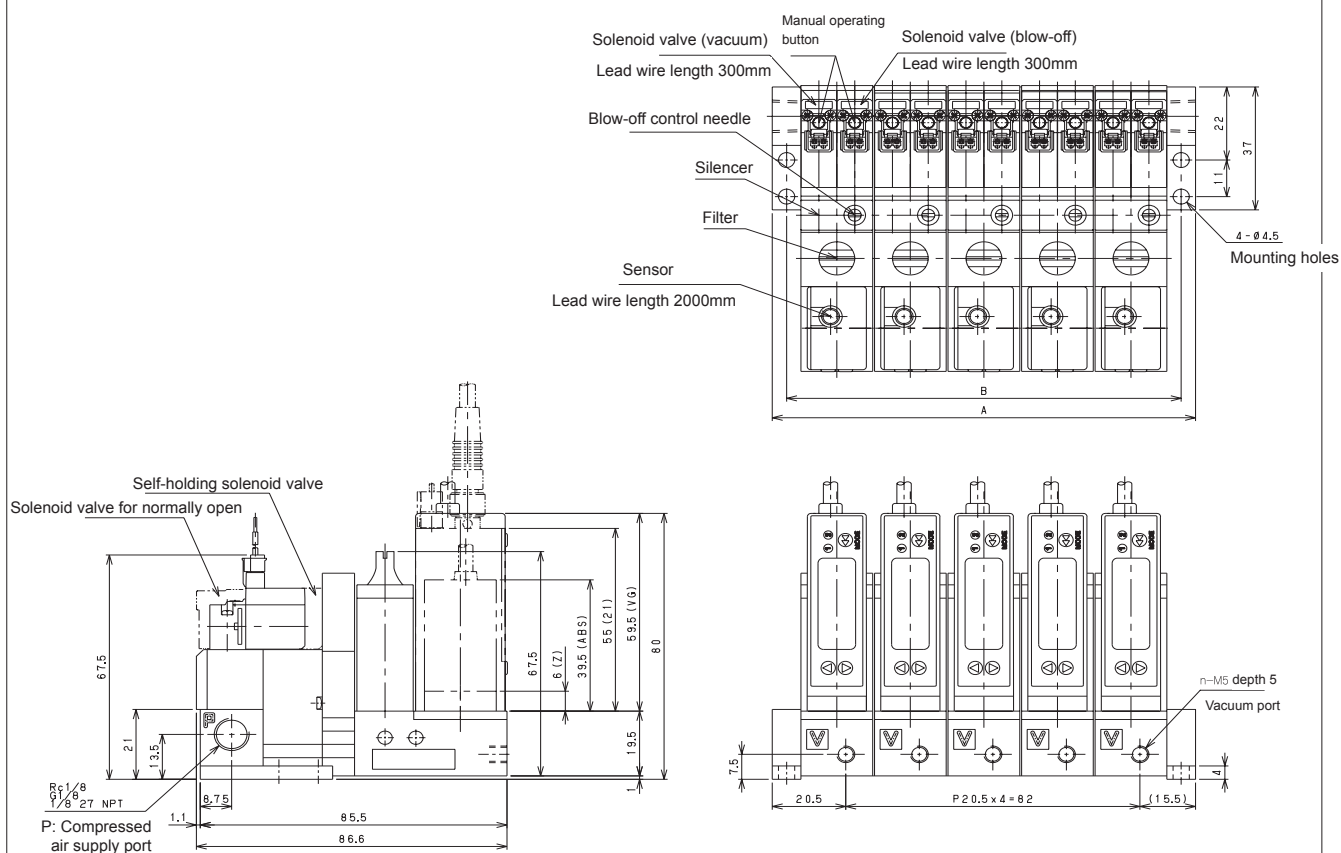
With check valve



Dimensions

Manifold type

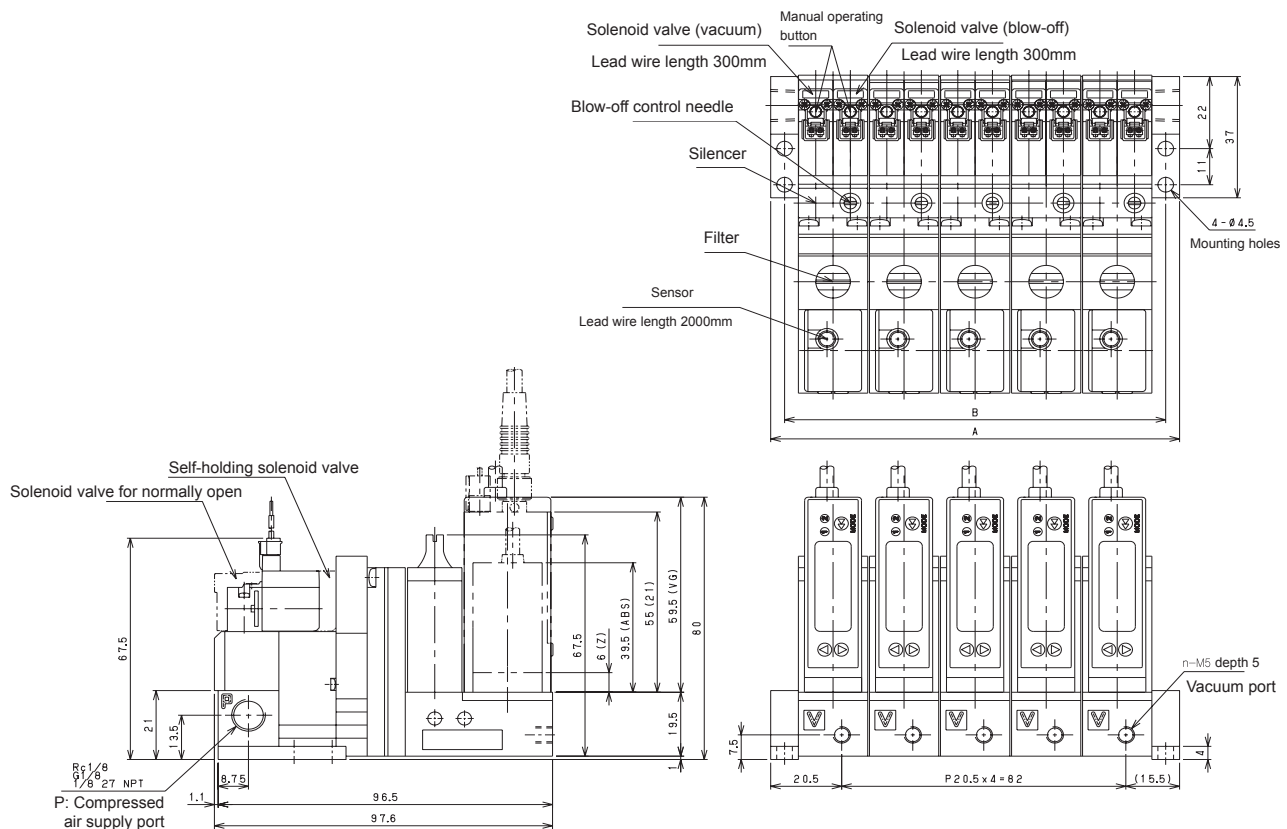
Without check valve



n(number of units)	1	2	3	4	5	6	7	8
A	36	56.5	77	97.5	118	138.5	159	179.5
B	28	48.5	69	89.5	110	130.5	151	171.5

Dimensions

Manifold type
With check valve



n(number of units)	1	2	3	4	5	6	7	8
A	36	56.5	77	97.35	118	138.5	159	179.5
B	28	48.5	69	89.5	110	130.5	151	171.5