

Compact Vacuum Pump



RoHS

**Air source not required/
Usable with 24 V power supply only**

Max. vacuum pressure	-74 kPa
Max. suction flow rate	4.5 L/min (ANR)

Vacuum pump Atmospheric release valve Pressure monitor

integrated



Simple adsorption/release operation

- Input signal: Adsorption/release command
- Output signal: Vacuum pressure monitoring via adsorption confirmation signal
- Equipped with automatic mode for automatic threshold value setting

Quick start function

Adsorption operation starts within 100 ms

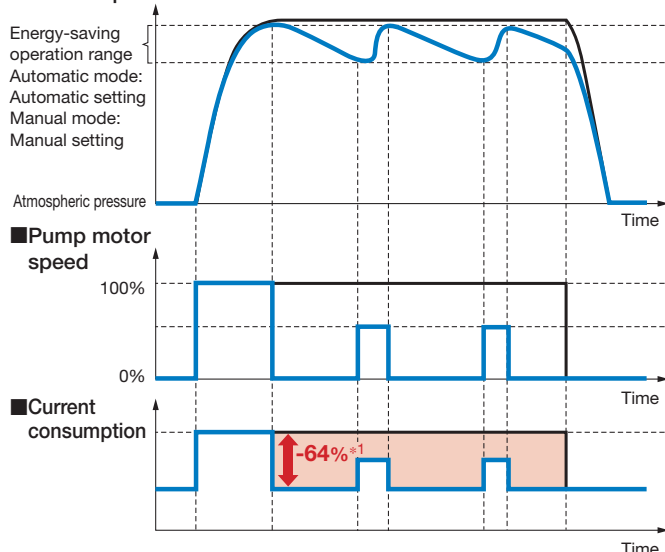
Automatic diagnosis function

Diagnosis results output with LEDs and digital signals

Energy-saving operation possible via automatic/manual modes

Current consumption Max. 64% reduction

Vacuum pressure



— : Energy-saving operation
— : Pump in continuous operation

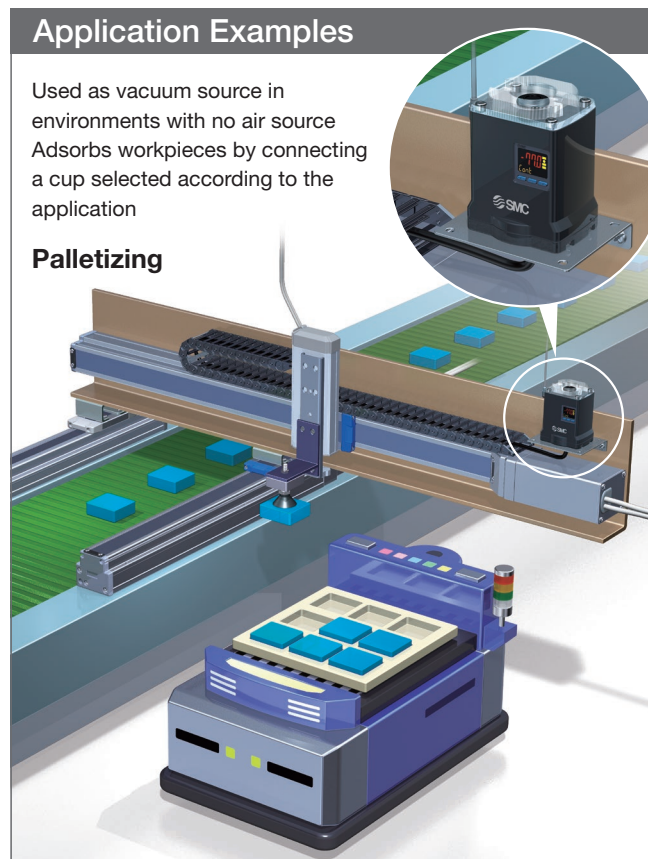
* The vacuum pressure waveform is only for reference. The actual operation may vary depending on the conditions such as the workpiece, cup, temperature, etc. Be sure to perform verification sufficiently prior to use.

*1 64% reduction in current consumption during pump stop and pump operation when using energy-saving operation. (Based on SMC's measurement conditions) This excludes inrush current.

Application Examples

Used as vacuum source in environments with no air source
Adsorbs workpieces by connecting a cup selected according to the application

Palletizing



ZXPE5-X3



26-E807

How to Order

ZXPE5 **N** **NN** - **M** **B** - X3

1 2 3 4 5

• Compact vacuum pump specifications



1 Cup mounting flange assembly

N	Without flange assembly
----------	-------------------------

2 Input/Output type

NN	NPN
NP	PNP

3 Connector cable

Nil	With connector cable
N	Without connection cable

4 Pressure monitor unit specifications

C	With unit switching function*1
M	SI unit only*2

*1 Under the new Measurement Act, switches with the unit switching function are not permitted for use in Japan.

*2 Fixed units: kPa, MPa

5 Pump mounting bracket assembly

B	With pump mounting bracket assembly
F	Without pump mounting bracket assembly

Specifications

Body specifications	Operating temperature range [°C]		5 to 40
	Connector type		M8 8-pin (Plug)
	Weight [g]	Body	441
		Pump mounting bracket assembly	207
		Connector cable	83
	Allowable load [kg]*1		5
	Max. vacuum pressure [kPa]*2		-74
	Max. suction flow rate [L/min(ANR)]*2		4.5
Power specifications	Noise level [dB(A)]*3		60
	Power supply voltage [V]		24 VDC ±10%
	Current consumption [mA]*4	Max. current*5	1,400
		Standby current*6	60
	Input type		PNP/NPN
IO communication input specifications	Input ON voltage [V]		15 or more
	Input ON current [mA]		3 or more
	Input OFF voltage [V]		5 or less
	Input OFF current [mA]		0.5 or less
	Output type		PNP/NPN
IO communication output specifications	Max. load current [mA]		200
	Protection		Short-circuit protection

*1 Allowable load on the body. When a load is applied to the body, ensure that it does not exceed the allowable load.

Suction and transfer exceeding the allowable load may result in product failure and the dropping of workpieces.

*2 Values at vacuum pump continuous operation under SMC's measurement conditions.

Values may change depending on atmospheric pressure (weather, altitude, etc.) or measurement method.

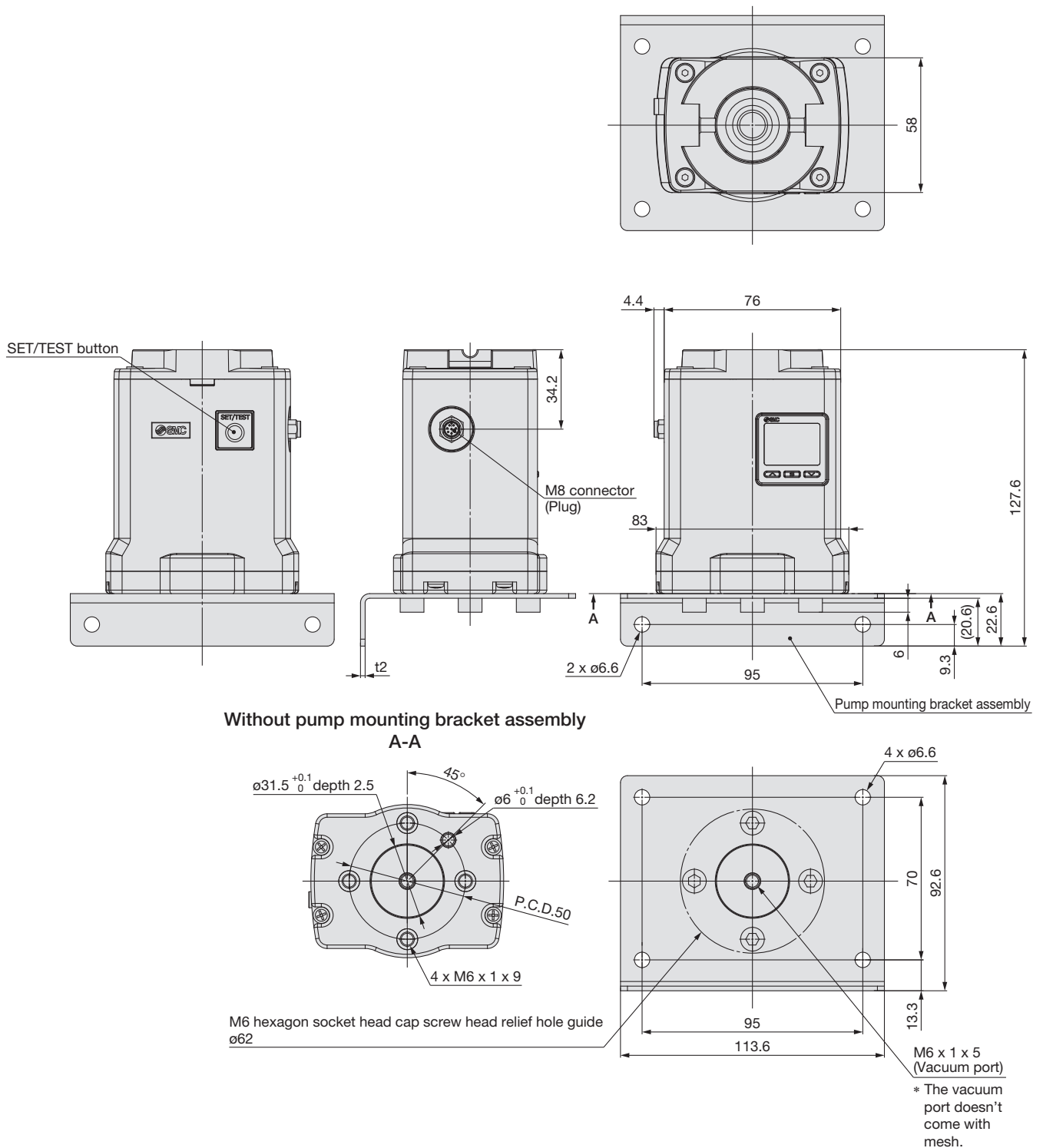
*3 Actual values under SMC's measurement conditions (Not guaranteed values)

*4 This represents the value when supply voltage of 24 VDC is applied.

*5 Includes inrush current

*6 The standby current represents an average current when the compact vacuum pump is on standby.

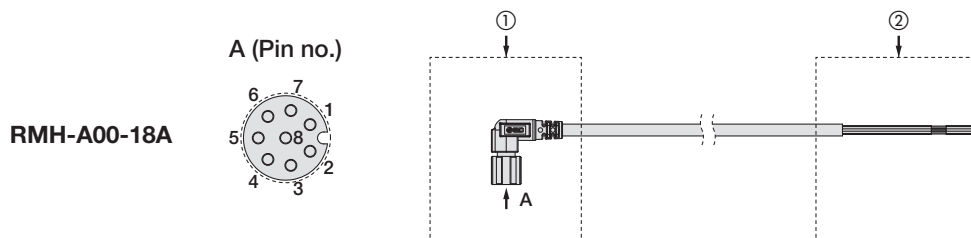
Dimensions



ZXPE5-X3

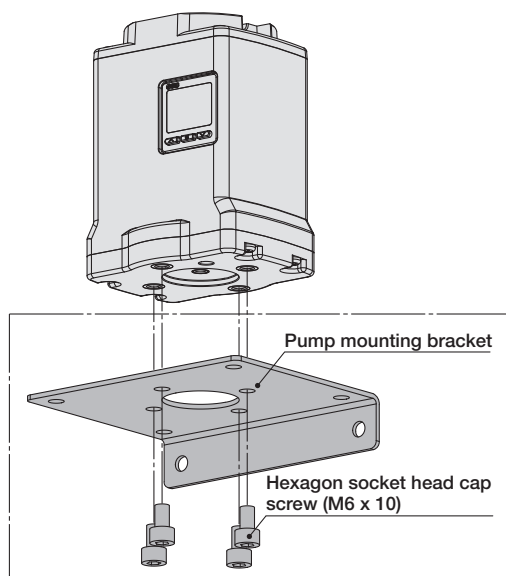
Options

Connector Cable

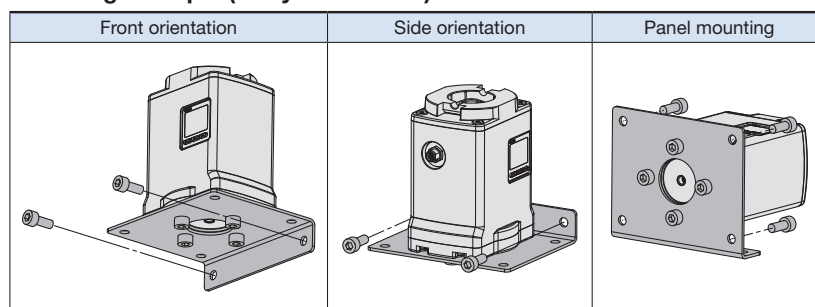


Part no.	① Pump side	② Control equipment side	Cable length [mm]
RMH-A00-18A	M8 8-pin connector (Socket)	Discrete wire	3000

Pump Mounting Bracket Assembly



Mounting example (Body orientation)



Part no.	Description	Quantities	Note
ZXPE5-LBK1-A-X3	Pump mounting bracket	1	
	Hexagon socket head cap screw (M6 x 10)	4	For securing the bracket to the pump

⚠ Safety Instructions Be sure to read the “Handling Precautions for SMC Products” (M-E03-3) and “Operation Manual” before use.