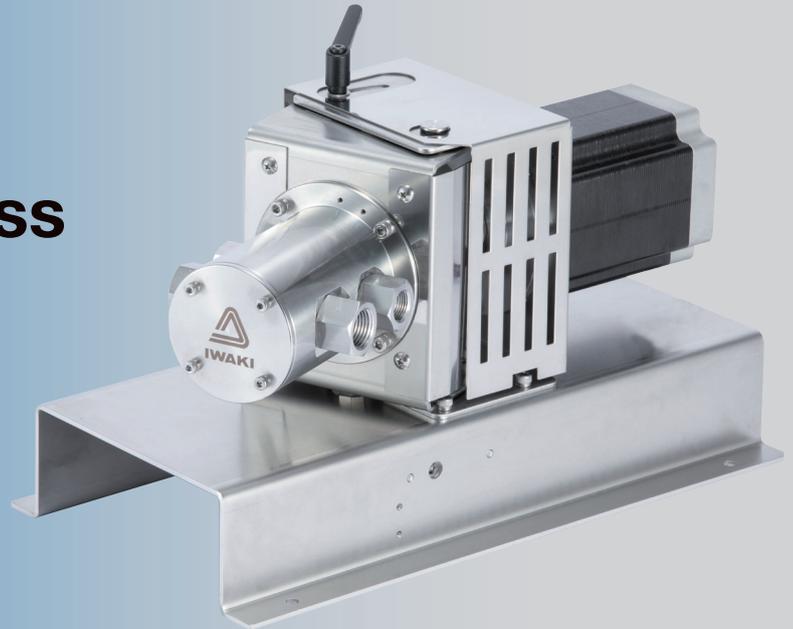


V-25 Precision Valveless Plunger Pump

up to 11 mL/shot



Ultra-high precision

The stepper motor enables high-precision injection with excellent controllability. To adjust the dispense volume, precise stroke adjustment is possible by adjusting the swing angle of the pump head with the rotary knob as desired.



CE marking Compliant

By complying with European EN standards, CE marking is now available as standard.



Reduces plunger seizing

The flushing port reduces the plunger lock caused by adhesive or crystallization of the fluid used.



Eliminates problems with the gas lock

The unique valveless structure eliminates problems with the gas lock. Even if gas is mixed in the chamber, it is discharged simultaneously with the pushing-out action of the plunger.



High chemical compatibility

Ceramics, SUS316, PTFE, and FEPM are used for wetted parts.



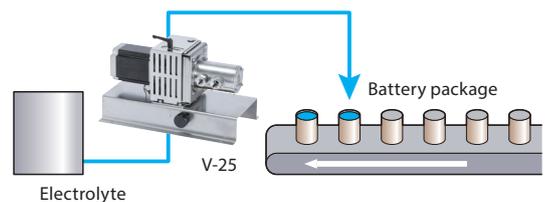
Simple structure

The pump head design is easy to maintain because of its simple structure with fewer parts. Pump head also disassembles easily.



Application

Electrolyte injection for rechargeable battery

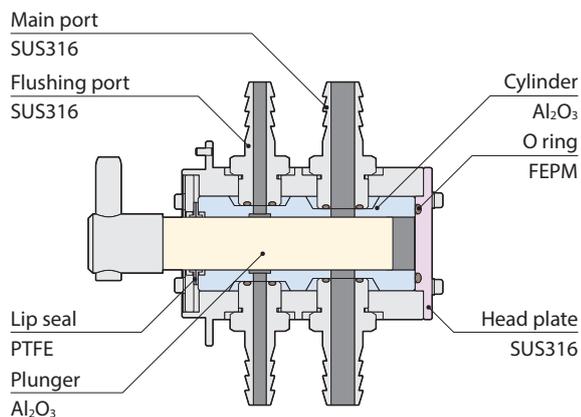


Identification

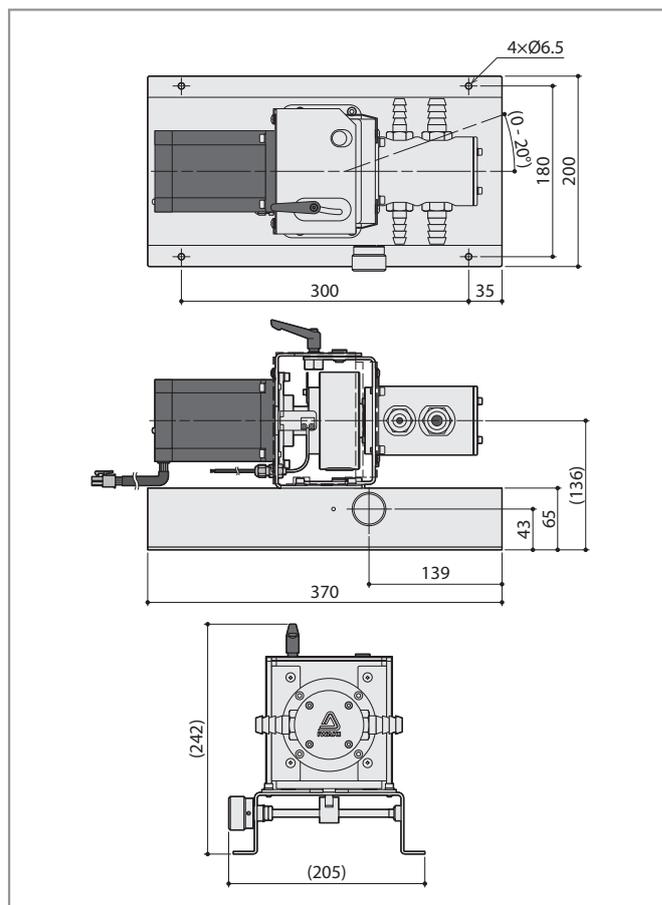
V - 25 A S P 7 7 - P

- | | | | |
|--|--|---|--|
| ① Series name
V : Hi-Cera pump | ③ Plunger/Cylinder material
A : Al ₂ O ₃ /Al ₂ O ₃ | ⑤ Flushing port
P : With flushing port
□ : Without flushing port | ⑦ Power voltage
7 : DC48V |
| ② Plunger diameter
25 : Ø25mm | ④ Pump head material
S : SUS304 (Machined) | ⑥ Joint
7 : Ø19 hose (Flushing port Ø14 hose)
8 : Rc1/2 female adapter (Flushing port Rc3/8 female)
9 : Ø16×Ø13 Union (Flushing port Ø8×Ø6 Union) | ⑧ Motor specifications
P : Stepper motor |

Materials



Dimensions (mm)



Specifications

Pump

Max. discharge capacity per shot	Max. discharge capacity per min (RV)	Max. motor speed	Max. discharge pressure	Mass
mL/shot	mL/min	min ⁻¹	PSI (MPa)	kg
11	3300	300	29 (0.2)	About 15

*The above information is based on pumping clean water at the full stroke length, ambient temperature and zero discharge pressure.

*The max flow volume per shot were collected at 100min⁻¹ with a discharge line open to the atmosphere.

*Allowable room temperature : 0 - 40°C (32-104°F)

*Allowable liquid temperature : 5 - 40°C (41-104°F)

*Allowable ambient humidity : 35 - 85%RH (non-condensing)

*The maximum allowable suction lift : 2m with clean water (can be changed with liquid characteristics)

*Flush the pump head with clean water or solvent after operation with the crystallizing or adhesive liquid.

Stepper motor

Type	Basic step angle	Power voltage	Insulation class
2-phase bipolar	1.8°	48VDC±1V	B

Photo micro sensor

Power voltage Vcc	Output open-circuit voltage Vo	Output inflow current Isink
DCV	V	mA
5 - 24	Vcc	50

Options

- *Motor cable 4 wires 1m
- *Motor cable 4 wires 3m (Photo left)
- *Stepper motor driver
- *AC-DC power supply 100 - 240V/48V
- *Lip seal insertion jig (Photo right)

