

ATS613-N (Air Operated) Spray Valve

— Instruction Manual —

Standard specifications

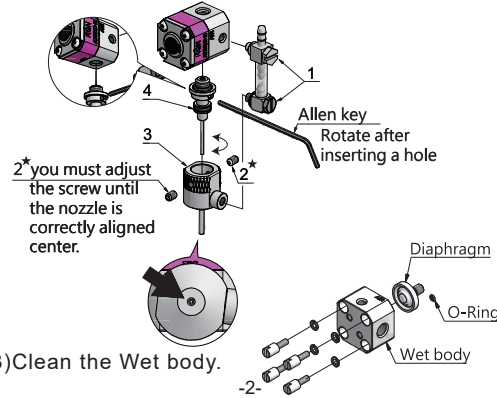
Type	ATS613-N
Valve structure	Spray valve
Viscosity	~0.3Pa.s(~300cps)
Wetted parts material	SUS316
Diaphragm material	PTFE
Material inlet dimension	Thread M5x0.8
Dosing port dimension	Spray port 0.6mm
Needle Length	10mm
Air inlet port	For Ø2.5X4mm tube
Dispensing pressure	0.35~0.49MPa (3.6~5.0kgf/cm ²)
Maximum input fluid pressure	0.2MPa(2.0kgf/cm ²)
Weight (Main unit)	39.2g

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Cleaning and Assembly Method

Be sure to dismantle the valve and clean it after use and before the material hardens

- (1) After discharging all of the output materials, pour the cleaning solvent into the container and then press the solvent through the valve body with low pressure.
- (2) Clean the Nozzle.
Dismantling: 1→2→3→4 (clockwise)
Assembly: 4 (counterclockwise)→3→2→1 (don't lock, the tube is pulled)→2→1

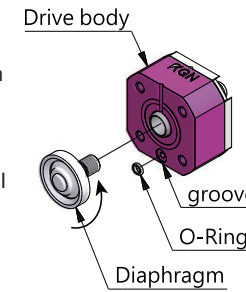


(3) Clean the Wet body.

Cautions for Dismantling and Assembly

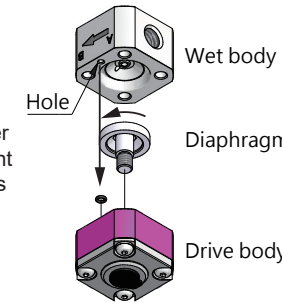
Dismantling

When dismantling the Valve, care should be taken to prevent damaging the diaphragm and Valve Head in order to keep air from mixing in the output material and to keep materials from dripping.



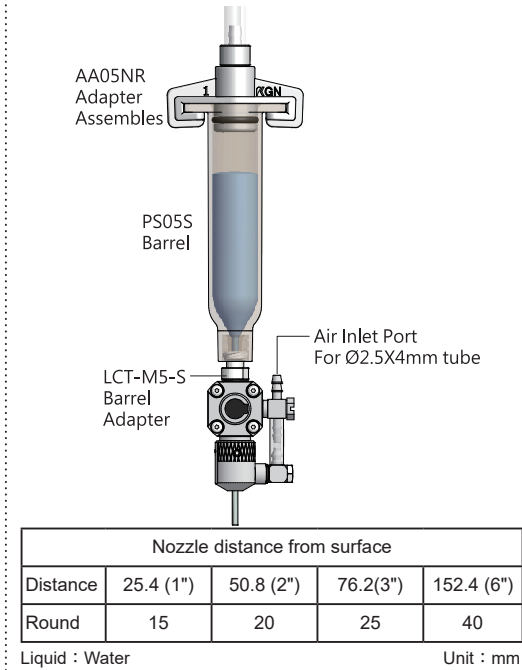
Assembly

When mounting the diaphragm on the Drive Unit, check if the Spacer is frayed and then mount after being confirmed as intact. When mounting the diaphragm, turn it lightly till stops.



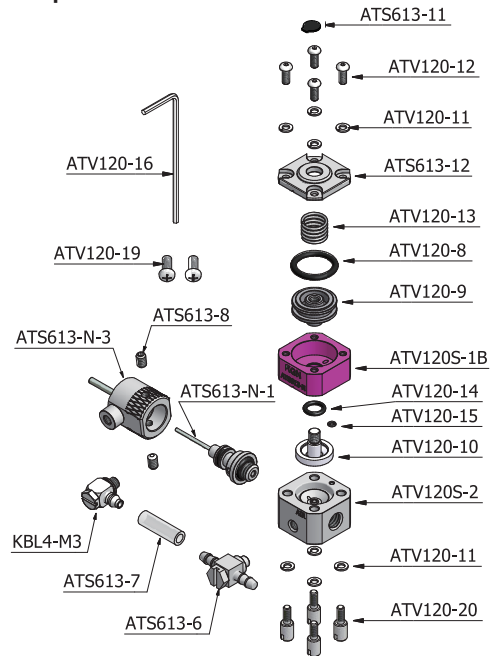
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Assembly



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Exploded View&Parts List



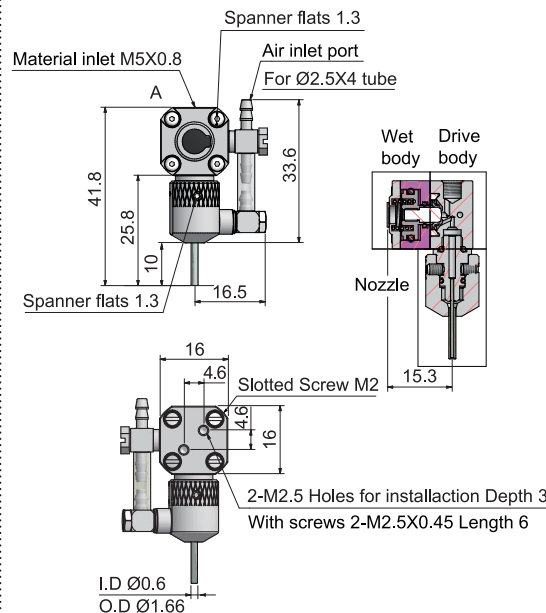
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Parts List			
Parts NO.	Description	Material	Quantity
ATV120S-1B	Drive body	A6061-T6	1
ATV120S-2	Wet body	SUS316	1
ATS613-12	Top body	SUS304	1
ATV120-8	O-ring	NBR	1
ATV120-9	Piston	A6061-T6	1
ATV120-10	Diaphragm	PTFE	1
ATV120-11	Spring washer	SUS304	8
ATV120-12	Screw	SUS304	4
ATV120-13	Spring	SWP	1
ATV120-14	O-ring	NBR	1
ATV120-15	O-ring	NBR	1
ATV120-16	Allen key	Cr-V	1
ATV120-19	Screw M2.5	CarbonSteel	2
ATV120-20	Slotted Screw M2	SUS303	4
KBL4-M3	Metal Fitting M3	SUS303	1
ATS613-6	Metal Fitting M3	Brass,electroless nickel	1
ATS613-7	Ø2.5X4 PU tube	PU	1
ATS613-8	Set screw M2.6	SUS304	2
ATS613-N-1	Nozzle	Body : SUS O-ring : Viton	1
ATS613-N-3	Air cap	SUS	1
ATS613-11	Cap	PC	1

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Sectional Drawing and Dimensions

Unit : mm



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Safety Caution

- If air gets into the Valve along with the material, air bubbles will be produced and will affect the output. Due to this, be sure to thoroughly remove air bubbles before use.
- As the Valve tends to vibrate when activated, it must be properly secured. When securing, do not damage the internal side of the Valve Body. To avoid affecting output, air bubbles must be completely removed before use.
- Unless required for specific applications, do not block the compressive air exhaust outlet.
- During cleaning maintenance, the solvent must be properly treated to avoid causing pollution or hazard to the environment.
- Before using this product, be sure to read relevant descriptions of this "Instruction Manual" thoroughly. Further, it is also necessary to communicate the "cleaning and maintenance" methods to site users.

Maintenance

- As the O-Ring used in the Drive Unit tends to wear along with the valve actions, it must be replaced according to actual conditions. If damage is found during assembly, be sure to replace it with a new one.
- The operating air of the Drive Valve must be screened through the Filter in sieving pore below 5 µm.
- Normally, the diaphragm should be replaced after being used for 2,000,000 rounds. (for reference only)
- The valve life depends on the material used and operating conditions.
- The valve life is about 500,000~1,000,000 cycles for no filler containing materials and about 100,000~300,000 cycles for filler containing materials.
- After using material that hardens naturally or crystallized liquid, be sure to dismantle the valve and clean it after use and before the material hardens.

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