Solution
Evolution
Technology

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2024.1

SAN-EI TECH®

Dispensing Product Guide

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When it comes to providing solutions to fluid dispensing challenges, SAN-EI TECH services customers across industrial sectors with unparalleled technical expertise.
SAN-EI TECH continues to offer a diverse product line that delivers both quality and value while responding to market demands for ever-higher precision and performance.

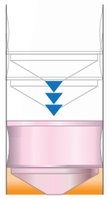
Contents

Wide range of components available for specific application needs

SET dispensing components are precision molded quality products that are easy to use and designed for the most accurate dispensing results.

Double-wiper Pistons

Ensures clean, smooth emptying of syringes without dripping or oozing with low friction, double-wiping action

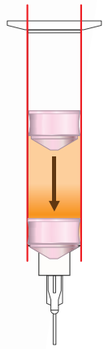


Polypropylene syringes with thick wall precision molded without release agent

Prevents cracking or rupturing, and provides excellent chemical compatibility

O° tapered internal bore

Provides complete wiping from top to bottom and controller dispensing for low to high viscosity materials



Inner bottom of syringe

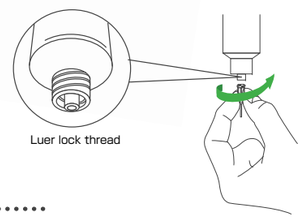
Provides smooth-flow fluid dispensing

Transparent tip hub

Ensures fluid flow inside the hub for accurate dispensing

Luer lock thread of both dispense tip and syringe

Ensures safe, secure attachment without the dispense tip or cap ever slipping off



Burr-free, polished stainless steel tube opening

Provides undisrupted fluid dispensing

Syringes

Precision fit between the double-wiper piston and the inside wall of the engineered 0°taper syringes ensures consistent fluid deposits with little wasted residue.

Size	Clear①	UV-block②	Black③	Pcs per box
3cc	SH09LL-B	SH09LB-B	SH09UV-B	50
5cc	SH10LL-B	SH10LB-B	SH10UV-B	40
10cc	SH11LL-B	SH11LB-B	SH11UV-B	30
30cc	SH12LL-B	SH12LB-B	SH12UV-B	20
55cc	SH13LL-B	SH13LB-B	-	15
75cc	SH14LL-B	SH14LB-B	-	10*

material: polypropylene　　*Bagged

① Clear syringe for most fluids
② 220-500nm UV block for light sensitive fluids
③ Opaque black syringe for light curing fluids

Pistons

Low-friction PE piston prevents dripping and oozing.

Size	Pink	Green	Yellow	Pcs per box
3cc	SH09PEP-B	—	SH09SPEY-B	50
5cc	SH10PEP-B	SH10PEM-B	SH10SPEY-B	40
10cc	SH11PEP-B	SH11PEM-B	SH11SPEY-B	30
30cc/55cc	SH12PEP-B	SH12PEM-B	SH12SPEY-B	20

material: polyethylene

Standard　　Loose

for low-mid viscosity　　for high viscosity

Syringe / Piston sets

Both syringes and pistons are packed as a set.

Size	Clear	UV-block	Black	Pcs per box
3cc	SH09CPP-B	SH09LBPP-B	SH09UPP-B	50
5cc	SH10CPP-B	SH10LBPP-B	SH10UPP-B	40
10cc	SH11CPP-B	SH11LBPP-B	SH11UPP-B	30
30cc	SH12CPP-B	SH12LBPP-B	SH12UPP-B	20
55cc	SH13CPP-B	SH13LBPP-B	-	15
75cc	SH14CPP-B	SH14LBPP-B	-	10*

Syringes and pistons (pink) are packed as a set.　　*Bagged

Option to prevent piston bounce

Size	Orange	Pcs per box
30/55/75cc	SH12RPE-B	20

material: polyethylene

Tip caps

Luer lock thread ensures safe, secure attachment and prevents leaks without slipping off.

Size	Part number	Pcs per box
one size	SH13G-B	50
	SH13TG-B	50

material: polypropylene

SH13G-B

SH13TG-B

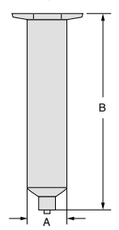
End caps

Unique snap-on design ensures easy, secure attachment.

Size	Part number	Pcs per box
3cc	SH09ECG-B	50
5cc	SH10ECG-B	40
10cc	SH11ECG-B	30
30/55/75cc	SH12ECG-B	20

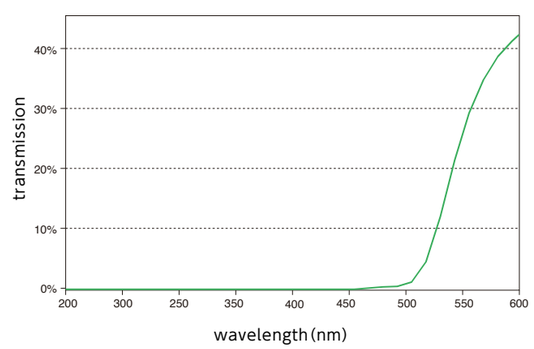
material: polyethylene

Dimensions (as standard)



	A	B
3cc	11.6mm(0.46″)	72.1mm(2.83 ″)
5cc	14.6mm(0.57 ″)	67.8mm(2.67 ″)
10cc	18.7mm(0.74 ″)	88.5mm(3.48 ″)
30cc	25.6mm(1.01 ″)	115.8mm(4.56 ″)
55cc	26.2mm(1.03 ″)	173.4mm(6.82 ″)

UV transmission



UV and Visible light to 500nm is 99% blocked!

Adapter assemblies

One-piece, molded adapter (polyacetal) with O-ring attached.
Assembly includes polyurethane tubing, BUNA O-ring and quick connect.

Size	Quick connector (standard)				Metal type connector		sets/box
	ϕ4mm		ϕ6mm		ϕ4mm	ϕ6mm	
	0.9m	1.8m	0.9m	1.8m	0.9m		
3cc	1000BSH48	1000BSH48-6	1000DSH48	1000DSH48-6	1000BSH48-ST	1000DSH48-ST	1
5cc	1000BSH49	1000BSH49-6	1000DSH49	1000DSH49-6	1000BSH49-ST	1000DSH49-ST	1
10cc	1000BSH50	1000BSH50-6	1000DSH50	1000DSH50-6	1000BSH50-ST	1000DSH50-ST	1
30/55/75cc	1000BSH52	1000BSH52-6	1000DSH52	1000DSH52-6	1000BSH52-ST	1000DSH52-ST	1

Material: polyacetal (adapter), polyurethane (tubing), BUNA (O-ring)　Length of tubing for metal type connector is 0.9M　* Metal type connectors are compatible with most other dispensers

Quick connector (standard)

Metal type connector

Replacement O-rings (for adapters)

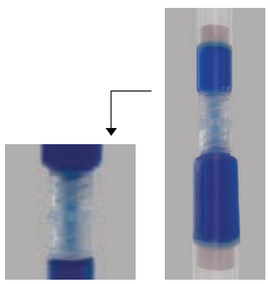
Tight tolerances ensure safe, secure attachment and prevent leaks without slipping off.

Size	BUNA nitrile rubber	VITON fluorine-contained rubber	EPR ethylene-propylene rubber	Pcs per box
3cc	SH48R-B	SH48RV-B	SH48RE-B	10
5cc	SH49R-B	SH49RV-B	SH49RE-B	10
10cc	SH50R-B	SH50RV-B	SH50RE-B	10
30/55/75cc	SH52R-B	SH52RV-B	SH52RE-B	10

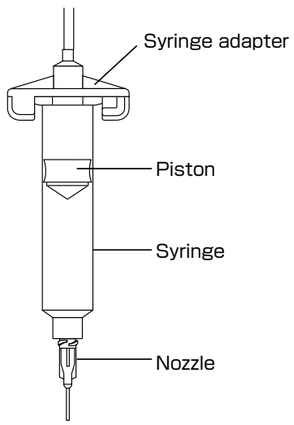
Adapter for barrel-to-barrel fitting
(common in 3cc, 10cc, 30cc, 55cc, 75cc syringes)

This is convenient for filling a prefilled mid-to-high viscosity material in a syringe into several small barrels.

material	part number	pieces per pack
polypropylene	SF60	10



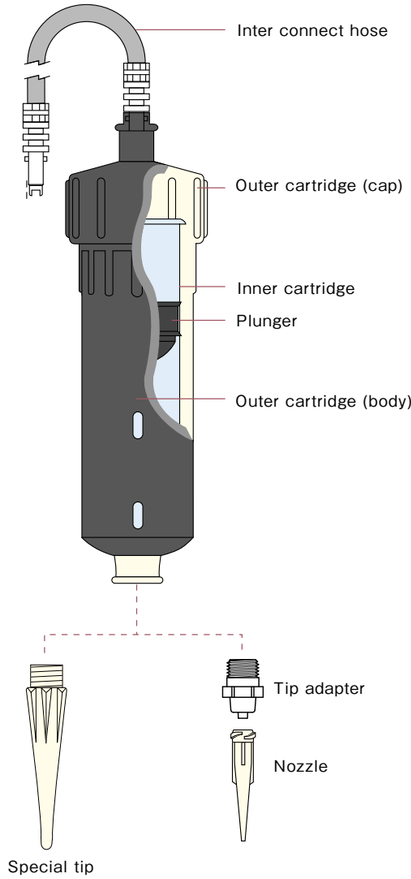
Syringe system



Cartridge Systems

Disposable plastic cartridges are available in 75cc, 180cc, 360cc, 600cc and 910cc capacities.
Outer container is durable up to 0.69MPa.

Type		75cc(2.5oz)	180cc(6oz)	360cc(12oz)	600cc(20oz)	910cc(32oz)	pcs
Inner cartridge		5190C	5192C	5194C	3704	3705	10
Plunger	Standard (black)	5196			–		10
	Wiper type (translucent)	5196WP-LD			3709		10
	Pressure relief type (translucent)	5196PRS			–		10
End cap		A605			3703		10
Tip cap		5192RT					10
Outer cartridge	Cap	SAR65R	SAR95R		SAR3700CAP		1
	Gasket for cap	560066	SAR95G		SC40222(O-ring)		1
	Body	SAR90R	SAR92R	SAR94R	SAR3720R	SAR3732R	1
Inter connect hose		ST10					1
Tip adapter		SF86					1

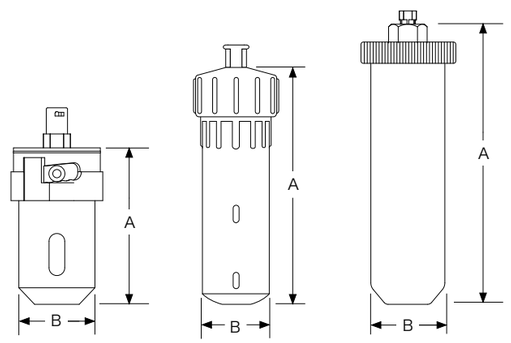


*Please refer to “Nozzle Components” on page 9.

Cartridge reservoir

Dimensions for outer cartridge

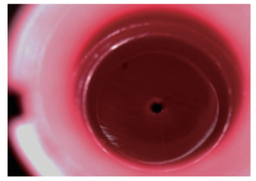
Cartridge	A	B
75cc	95mm	46mm
180cc	178mm	49mm
360cc	308mm	49mm
600cc	268mm	71mm
910cc	370mm	71mm



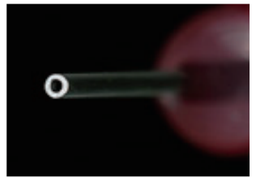
75cc　180cc/360cc　600cc/910cc

Precise, consistent dispensing is determined by the type of dispense tip selected

Without burrs or flash, precision dispense tips produce the very best deposit control.
An extensive lineup of dispense tips allows for conformance with various materials, work pieces and applications.



Precisely-molded flat sealed seat at hubs provides unrestricted fluid flow



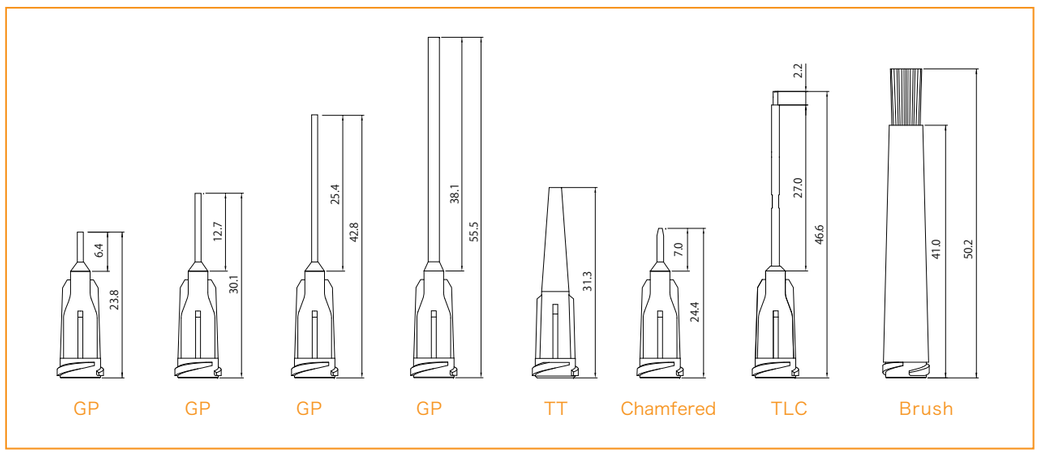
Polished burr-free tips ensure accuracy

Color coding for tip sizes (GP needle tips, angled tips)

Color	Gauge	ID size (mm)	OD size (mm)
olive	14	1.55	1.83
amber	15	1.37	1.65
green	18	0.91	1.27
pink	20	0.61	0.91
purple	21	0.51	0.81
blue	22	0.41	0.71
orange	23	0.33	0.64
red	25	0.25	0.51
clear	27	0.21	0.41
lavender	30	0.16	0.31
yellow	32	0.11	0.23

Dimensions (example)

unit : mm



GP needle tips

A wide variety of needle lengths and diameters can be selected for general application.
Burr-free, polished tips provide consistent fluid flow.

General purpose

Gauge	Needle length 6.4mm (0.25″)	12.7mm (0.5″)	25.4mm (1″)	38.1mm (1.5″)	Hub color	Pcs per box
14	SH14-0.25-B	SH14-B	SH14-1-B	SH14-1.5-B	olive	50
15	SH15-0.25-B	SH15-B	SH15-1-B	SH15-1.5-B	amber	50
18	SH18-0.25-B	SH18-B	SH18-1-B	SH18-1.5-B	green	50
20	SH20-0.25-B	SH20-B	SH20-1-B	SH20-1.5-B	pink	50
21	SH21-0.25-B	SH21-B	SH21-1-B	SH21-1.5-B	purple	50
22	SH22-0.25-B	SH22-B	SH22-1-B	SH22-1.5-B	blue	50
23	SH23-0.25-B	SH23-B	SH23-1-B	SH23-1.5-B	orange	50
25	SH25-0.25-B	SH25-B	SH25-1-B	SH25-1.5-B	red	50
27	SH27-0.25-B	SH27-B	—	—	clear	50
30	SH30-0.25-B	SH30-B	—	—	lavender	50
32	SH32-0.25-B	—	—	—	yellow	25

hub : polypropylene
shaft : 304 stainless steel

TT tapered tips

TT tapered tip provides smooth flow minimizing air entrapment. Gel-type cyanoacrylate adhesives can also be applied.

General purpose

Gauge	ID size mm(in)	OD size mm(in)	Material standard	Material opaque rigid	Color	Pcs per box
14	1.60 (.062″)	2.03 (.079″)	SH14TT-B	SH14RTT-B	olive	50
16	1.19 (.047″)	1.63 (.064″)	SH16TT-B	SH16RTT-B	gray	50
18	0.84 (.033″)	1.25 (.049″)	SH18TT-B	SH18RTT-B	green	50
20	0.59 (.023″)	1.02 (.040″)	SH20TT-B	SH20RTT-B	pink	50
22	0.41 (.016″)	0.81 (.016″)	SH22TT-B	SH22RTT-B	blue	50
25	0.25 (.010″)	0.79 (.031″)	SH25TT-B	SH25RTT-B	red	50
27	0.20 (.007″)	0.41 (.016″)	—	SH27RTT-B	white	50

standard : polyethylene
opaque rigid : polypropylene

Angled tips

Angle shaft allows for reaching under or inside work.
Available with 45° and 90° bends and 10 different tip diameters ranging from 14 to 30 gauge.

General purpose

Gauge	Needle length 12.7mm/45° (0.5″)	12.7mm/90° (0.5″)	Hub color	Pcs per box
14	SH14-B-45	SH14-B-90	olive	50
15	SH15-B-45	SH15-B-90	amber	50
18	SH18-B-45	SH18-B-90	green	50
20	SH20-B-45	SH20-B-90	pink	50
21	SH21-B-45	SH21-B-90	purple	50
22	SH22-B-45	SH22-B-90	blue	50
23	SH23-B-45	SH23-B-90	orange	50
25	SH25-B-45	SH25-B-90	red	50
27	SH27-B-45	SH27-B-90	clear	50
30	SH30-B-45	SH30-B-90	lavender	50

hub : polypropylene
shaft : 304 stainless steel

PP flexible tips

Polypropylene shaft reaches into hard-to-access areas and will not scratch delicate surfaces.

General purpose

Gauge	ID size mm(in)	OD size mm(in)	Needle length 12.7mm (0.5″)	Needle length 38.1mm (1.5″)	Hub color	Pcs per box
15	1.35 (.053″)	1.65 (.065″)	SH15PPS-B	SH15PP-B	amber	50
18	0.80 (.032″)	1.21 (.048″)	SH18PPS-B	SH18PP-B	green	50
20	0.47 (.019″)	0.85 (.033″)	SH20PPS-B	SH20PP-B	pink	50
25	0.40 (.016″)	0.80 (.032″)	SH25PPS-B	SH25PP-B	red	50

hub : polypropylene
shaft : polypropylene

Flexible shaft will not scratch delicate surfaces.

Chamfered tips

Precision chamfering minimizes surface contact area of wetted tips for dispensing microdots with low viscosity fluids.

Small area

Gauge	Tip ID size mm(in)	OD size mm(in)	Needle length 6.4mm (0.25″)	Needle length 7.0mm (0.28″)	Needle length 9.5mm (0.37″)	Needle length 12.7mm (0.5″)	Hub color	Pcs per box
23	0.34 (.013″)	0.64 (.025″)	—	—	—	SH23CH-B	orange	50
25	0.26 (.010″)	0.51 (.020″)	—	—	—	SH25CH-B	red	50
27	0.21 (.008″)	0.41 (.016″)	SH27CH-0.25-B	—	—	—	clear	25
30	0.17 (.007″)	0.51 (.020″)	—	—	SH30CH-B	—	red	25
33	0.11 (.004″)	0.41 (.016″)	—	SH33CH-B	—	—	clear	25

hub : polypropylene
shaft : 304 stainless steel
* Values on ID, OD are for tip orifice.

Tip image

TLC PTFE-lined tips

PTFE inner lining inside shaft resists clogging of cyanocrylates.

Gauge	Tip teflon OD size mm(in)	Tip teflon ID size mm(in)	Needle OD size mm(in)	Needle length		Hub color	Pcs per box
				16.5mm	29.2mm		
21	1.18 (.046″)	0.68 (.027″)	1.65 (.065″)	SH21TLCS-B	SH21TLC-B	gray	50
25	0.76 (.030″)	0.30 (.012″)	1.27 (.050″)	SH25TLCS-B	SH25TLC-B	pink	50

hub: Polypropylene
shaft: 304 stainless steel
inner lining: PTFE (low surface energy)

Oval tips

Oval stainless steel tips apply thick material in about 2mm width flat ribbon deposits.

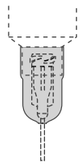
Gauge	Needle length	Color	Pcs per box
	12.7mm		
15	SH15OVAL-B	amber	50

Outlet size (ID)：1.98×0.41mm

hub: Polypropylene
shaft: 304 stainless steel

Tip shields for light-sensitive and UV-cure materials

Syringe size	Part number	Color	Pcs per box
3cc	SH03	red	10
5～55cc	SH06	black	10



Brush tips

Nylon bristles will not damage work surfaces and are best for spreading glues and greases.
Available in soft or stiff bristles.

Style	Standard	High flow
soft	SH40A	SH40HF
stiff	SH41A	SH41HF

bristle: nylon

High flow nozzles

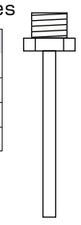
High flow nozzles can be used with SV35 or SV45 valves to achieve higher flow or higher transfer efficiency.
mounting: 1/4 NPT

Special nozzles

Part number	Length × outlet (mm)	Pcs per pack
SN80	63.5×φ3.2	10
SN81	63.5×φ1.6	10
SN82	101.6×φ1.6	10
SN83	101.6×φ0.8	10

High pressure resistant nozzles

Part number	ID(mm)	OD(mm)	Pcs per box
SH008-1/4NPT	3.64	4.20	1
SH010-1/4NPT	2.84	3.40	1
SH012-1/4NPT	2.40	2.76	1
SH016-1/4NPT	1.25	1.61	1



Lab Kit SH100-SK

*Please indicate the part number as "SH100" if you would like to purchase only the Nozzle Kit.

Lab Kit SH100-SK offers an assortment of dispensing components specifically for new users of dispensers or those who require the best dispenser according to a particular application.
The Nozzle Kit includes nozzle sizes ranging from 14G for general purpose to 30G for minute dispensing amounts.

Contents

- Nozzle Kit … 1 set
- 3cc/5cc/10cc/30cc/55cc syringe（clear・UV block）…4 for each
- 3cc/5cc/10cc piston …8 for each
- 30cc&55cc piston… 16 for each
- 3cc/5cc/10cc/30cc&55cc syringe adapter…1 for each

Metal needle tips

13mm tip is the standard length with other customized lengths available.

Part number	ID size mm(in)	OD size mm(in)	Pcs per box
SSN-20	0.65 (.026″)	0.89 (.035″)	12
SSN-21	0.53 (.021″)	0.81 (.032″)	12
SSN-22	0.47 (.019″)	0.71 (.028″)	12
SSN-23	0.38 (.015″)	0.64 (.025″)	12
SSN-24	0.34 (.013″)	0.56 (.022″)	12
SSN-25	0.33 (.013″)	0.51 (.020″)	12
SSN-26	0.25 (.010″)	0.45 (.018″)	12
SSN-27	0.21 (.008″)	0.41 (.016″)	12
SSN-28	0.18 (.007″)	0.38 (.015″)	12

shaft neck: Ni plate,
shaft: 304 stainless steel

Metal nozzles (one per unit)

High precision nozzle machined as a single component provides smooth fluid flow.

Part number	ID size mm(in)	OD size mm(in)
SPN-40	0.40 (.016″)	0.50 (.020″)
SPN-35	0.35 (.014″)	0.45 (.018″)
SPN-30	0.30 (.012″)	0.40 (.016″)
SPN-25	0.25 (.010″)	0.35 (.014″)
SPN-20	0.20 (.008″)	0.30 (.012″)
SPN-15	0.15 (.006″)	0.25 (.010″)
SPN-10	0.10 (.004″)	0.20 (.008″)

material: 303 stainless steel
shaft neck: double-thread screw
minimum inner diameter must be 10mm.

Super-Fine ceramic nozzles (one per unit)

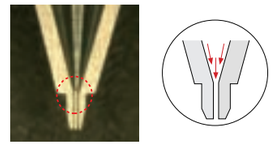
Nozzle sizes can be manufactured in increments of 5μm from a nozzle inner diameter of 0.005mm

material: 303 stainless steel
shaft: ceramic (zirconia)
shaft neck: double-threaded screw

Smooth inner surface of the nozzle prevents clogging and ensures consistent fluid flow

- Double-threaded-screw type nozzle allows for secure attachment to a syringe ensuring excellent air tightness.
- Chamfered-type tip reduces residue of a thick paste, which is ideal for minute dispensing amounts.

Cross-cut picture (standard)



No clogging and ensures smooth fluid flow

Multiple nozzle manifold tips

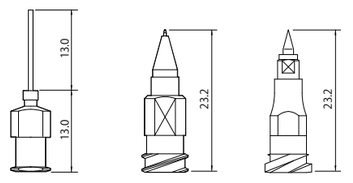
Best for applications of medium to high viscosity fluids. Different numbers of nozzles and lengths are available. Multiple chamfered nozzles with tapered tips are also available.

Flat nozzle

Used for thin-flim coating on a wider surface.

Dimension(sample)

unit：mm



Metal needle tips　Metal nozzles　Ceramic nozzles

SET Dispensers for superior quality and best yields in precision assembly processes

SDP Series Dispensers are designed to optimize the dispensing of adhesives, lubricants and other assembly fluids by increasing throughput, improving yields and reducing production costs.

SDP520

Most versatile, all-digital display for optimal process control

SDP520 dispensing controller is ideal for a wide variety of applications that involve manual operation or automated processes. All-digital display provides easy programming for the processes that require a high degree of process control.

SDP420

Programmable dispensing ensuring a high degree of process control

SDP420 dispensing controller is designed to control many applications of various assembly fluids to improve yields and reduce production costs. SDP400 features vacuum function, TEACH function and internal air pressure reservoir to enhance consistency in dispensing.

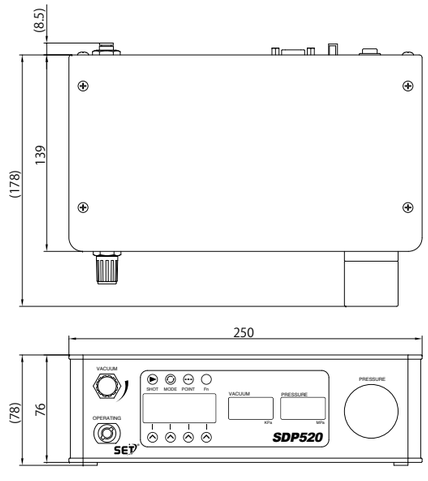
Specifications

	SDP520	SDP420
Power	VDC24 (VAC100-240 adapter)	
Power Consumption	18W	
Air Input Requirement	0.7MPa Maximun Note: Clean, dry filtered factory air or five micron filter regulator is required.	
Pressure setting range	0～0.60MPa	0～0.50MPa
Time setting range	0.005～999.9sec	
Start input	Footpedal, Band switch, signal for VDC5-24 (I/O)	
I/O	D-sub 9 pin connector	
Storage condition	5℃-40℃ (non-condensing)	
External dimensions ( ) including protruding portion	W250×D139(187)×H76(78)	W160×D139(176)×H76(78)
Weight	1.6ｋｇ	1.0ｋｇ
Accessories	AC adapter Foot pedal switch	
	features	
Regulator type	precise	
Vacuum function	yes	
Display dispense timing	digital	
air pressure	digital	
vacuum pressure	digital	analog
Teaching function	yes	
Internal air pressure circuit	○	—

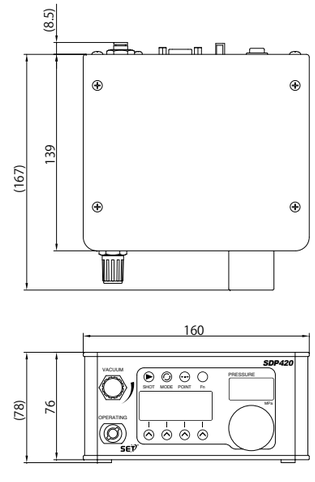
unit:mm

Dimensions (unit:mm)

SDP520



SDP420



Precision valve systems – low maintenance, rugged and reliable

The best valve can be selected according to the characteristics of the use materials and the requirements for applications ensuring high quality dispensing.

Diaphragm valves

Accurate and speedy shut-off movement provides no drips P18,19

SV62

- Compact size and lightweight construction allows for easy installation
- UHMW polymer wetted chamber and diaphragm valve is best for reactive-materials

SV62-B

- Ideal for applying anaerobic UV adhesives
- Wetted parts made of resin enable to be used for reactive materials

SV12

- Extremely small design (length: 63.2mm weight:85g)
- Easy installation for small spaces

Needle valves

Best for consistent small amount applications with various adhesives, solvents or other mid-to-high viscous fluids P20, 21

SV51

- Unique packing structure enhances durability
- Drip-free design ensures millions of cycles

SV59MD

- Consistent microdots with a variety of assembly fluids
- Unique sealing structure enhances durability

Valve controller SVC720V

Consistent, precise volume control for high precision dispensing valves

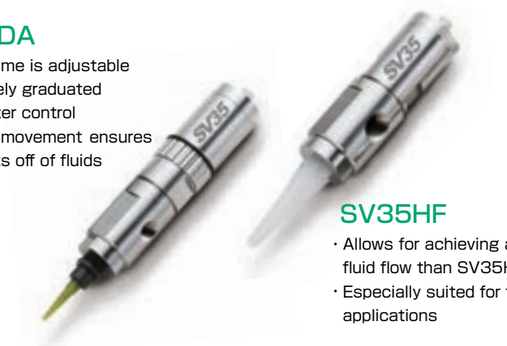
SVC720V

Piston valves

Reliable shut-off feature clearly cuts off deposits ofmid-to-high viscous fluids like sealants P22, 23

SV35DA

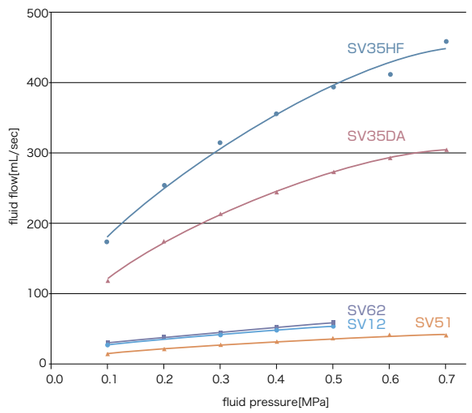
- Fluid volume is adjustable using finely graduated micrometer control
- Pullback movement ensures clean cuts off of fluids



SV35HF

- Allows for achieving a higher fluid flow than SV35HF
- Especially suited for filling applications

Valve Fluid Flow Reference



■ Condition: without nozzle, valve activating pressure: 0.5MPa
Material used: water

Spray valves

Best for spraying of thin coatings or markings with low viscosity fluids P24, 25, 26, 27

SV91

- Low volume, low pressure spray coatings enable high transfer efficiency
- No overspray, no misting

SV59MS

- Low pressure, very fine volume spraying coatings
- No overspray, no misting

Spray valve controller

Low volume low pressure air allows high transfer efficiency without mist or overspray.

SVC620S

<High viscosity spray valve>

SV01S

- Used for spraying higher viscosity materials
- Controlled spraying without splattering

SV01CS

- Used for spraying higher viscosity materials
- Controlled spraying without masking to prevent splattering

Conformal coating valves

Fast, precise conformal coating for moisture-proof material P28, 29

SV91CD

- Non-contact dot, spraying or line dispensing, three different patterns of conformal coatings can be selected depending on the application

SV70

- Best for application of thin film coating of moisture-proof material in clearly defined patterns
- Square-cut carbide nozzle reduces clogging and increases reliability
- Large area coverage with low flow rates

Valve Controller specified for SV91CD

Non-contact dot, spray, line dispensing can be programmed with I/O signals.

SVC620CD

Solenoid valve SVEM720

Solenoid valve SVEM59

Valve Controller specified for SV70

Along with excellent high-speed response, precise thin-film patterns of conformal coating can be obtained.

SVC720F

Solenoid valve SVEM720

Solenoid valve SVEM59

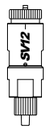
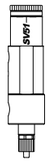
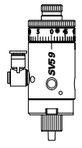
High pressure spool valve

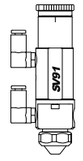
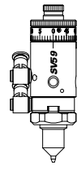
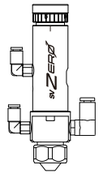
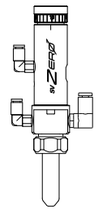
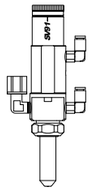
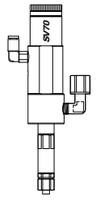
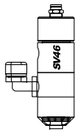
Allows for high speed transferring of high viscosity sealants, greases and other high viscosity materials P30

SV46

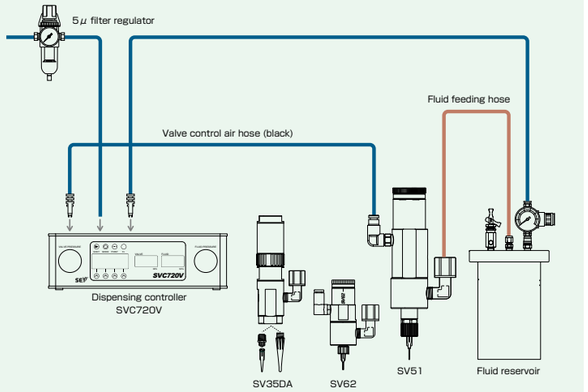
- Designed to withstand high pressure dispensing of fluids (up to 17.2MPa)
- Easy maintenance
- High pressure transferring pump can be connected

Valve specifications

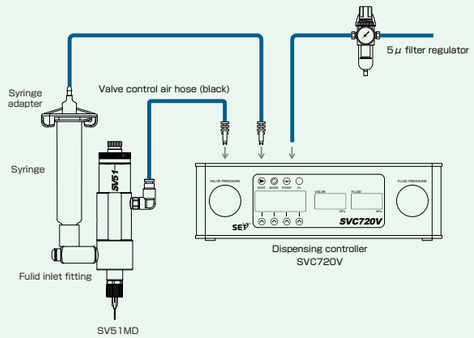
Application	For low viscosity fluids			For low-to-mid viscosity fluids		For mid-to-high viscosity fluids	
Model	**SV62**	**SV62-B**	**SV12**	**SV51**	**SV59MD**	**SV35DA**	**SV35HF**
							
Valve type	Diaphragm type			Needle type		Piston valve type	
Weight and size	154g ϕ26.9×79.0mm	154g ϕ26.9×79.0mm	85g ϕ18.9×63.2mm	312g ϕ26.9×113.0mm	244g ϕ27mm×79mm	379g ϕ28.5×141.0mm	333g ϕ31.1×100.0mm
Wetted parts	UHMW	UHMW	UHMW 303 stainless steel	Teflon or UHMW 303 stainless steel	PTFE,FKM,PP 303 stainless steel	UHMW 303 stainless steel	UHMW 303 stainless steel

For spray coating			For conformal coating			High pressure spool valve
SV91	**SV59MS**	**SV01S**	**SV01CS**	**SV91CD**	**SV70**	**SV46**
						
Needle type air atomizing spray nozzle			Needle type			High pressure balanced-spool type
294g ϕ26.9×105mm	280g ϕ27mm×91mm	312g ϕ26.9×105mm	312g ϕ26.9×143mm	312g ϕ26.9×136.3mm	334g ϕ26.9×141mm	728g ϕ38.1X 119.4mm
Teflon or UHMW 303 stainless steel	PTFE,FKM,PP 303 stainless steel	SUS303 Teflon	SUS303 Teflon	Teflon or UHMW 303 stainless steel	Teflon or UHMW 303 stainless steel	UHMW 303 stainless steel

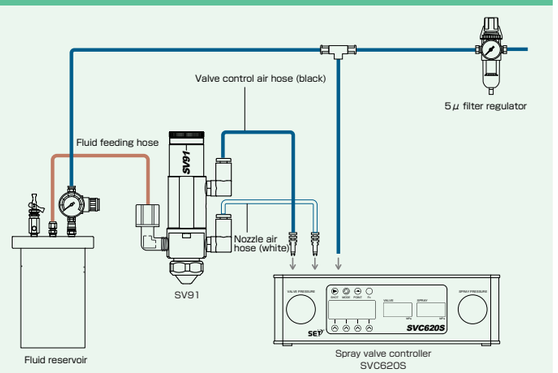
Diaphragm type, Needle, Piston type



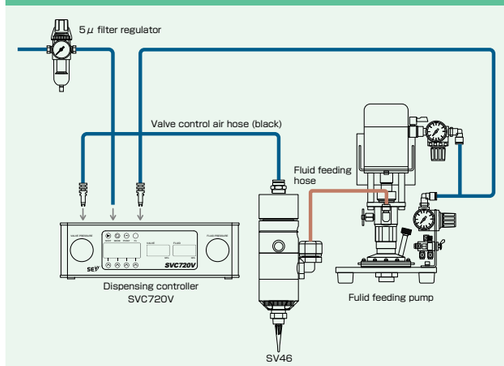
Needle type (with syringe)



Spray type



High pressure spool type



Valve applications

Fluids	Microdots	Dots	Potting/ Encapsulating	Lines/Stripes	Filling/ Packaging	Micro Spray	Spray
Moisture-proof coating material	SV59MD	SV51	—	SV70、SV51	—	SV59MS	SV01CS
Anaerobic adhesive	SV22	SV62、SV22	—	SV62、SV22	—	—	—
Brazing paste	—	SV35DA	—	SV35DA	SV35HF	—	SV01S
Cyanoacrylate	SV22	SV62、SV22	—	SV62、SV22	—	—	—
Electrolytes	SV51	SV62、SV22	—	—	SV62	SV59MS	SV91
Epoxy adhesive	SV59MD	SV51	SV35DA	SV35DA	SV35HF	—	SV01S
Fluxes	SV59MD	SV51	—	SV51	—	SV59MS	SV91
Greases	SV51	SV35DA	—	SV35DA	SV35HF	—	SV01S
High viscosity greases	—	SV46	—	SV46	SV46	—	—
Oils	SV59MD	SV51	—	SV51	SV35HF	SV59MS	SV91
Inks	SV59MD	SV51	—	SV51	—	SV59MS	SV91
Reagents	SV59MD	SV51	—	—	—	SV59MS	SV91
RTV/sealants	SV51	SV35DA	SV35DA	SV35DA	SV35HF	—	SV01S
Resists	—	SV35DA	—	SV35DA	SV35HF	—	SV01S
Solvents	SV59MD	SV51	—	SV51	SV35HF	SV59MS	SV91
Solder pastes	—	SV35DA	—	SV35DA	—	—	—
UV curable adhesive	SV59MD	SV51	SV62-B	SV62-B	SV35HF	SV59MS	SV01S
UV curable adhesive (anaerobic)	SV22	SV62-B、SV22	SV62-B	SV62-B、SV22	SV62-B	—	—
Emulsion adhesive	—	SV35DA	—	SV35DA	SV35HF	—	SV01S

*This chart is only for reference. Compatibility with the actual fluid to be used requires individual testing.

SV62

Precision compact diaphragm for accurate flow control

SV62 precision diaphragm valve is designed to dispense controlled amounts of low to medium viscosity fluids such as solvents, cyanoacrylates, anaerobics and fluxes without chemical reaction by isolating fluid from internal parts.

Specifications

Size	ϕ26.9mm (Fluid body) x 79.0mm length
Weight	154g
Air cylinder body	SUS303
Diaphragm	UHMW*
Valve head	UHMW*
Tip adapter	Polypropylene
Fluid outlet port	1/8NPT female
Mounting hole	M5 female
Valve operating air pressure	0.4~0.62MPa
Maximum fluid pressure	0.48MPa

*Ultra High Molecular Weight

How the Valve Operates

Input air pressure retracts the diaphragm seal, permitting fluid to flow. (Figure 1)
Once the cycle is completed, the spring retracts the piston and the diaphragm closes to shut off the fluid. (Figure 2)

SV62 ·SV62-B

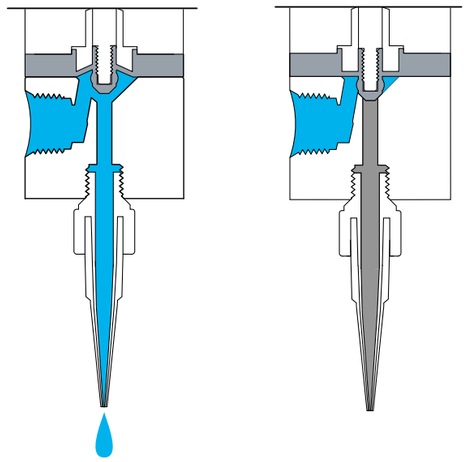


Figure 1

Figure 2

SV62-B

SV62-B precision diaphragm valve, using black UHMW* resin, which features superior chemical resistance and fluid-shielding property, enables to dispense low-viscosity fluids such as UV adhesives and UV anaerobic adhesives consistently without dripping.

Specifications

Size	ϕ26.9mm (Fluid body) x 79.0mm length
Weight	154g
Air cylinder body	SUS303
Diaphragm	UHMW*
Valve head	UHMW*
Tip adapter	Polypropylene
Fluid outlet port	1/8NPT female
Mounting hole	M5 female
Valve operating air pressure	0.4~0.62MPa
Maximum fluid pressure	0.48MPa

*Ultra High Molecular Weight

SV12

Mini-diaphragm valve for controlled, consistent coatings where space is limited

SV12 mini-diaphragm, about 60% smaller than SV62 in size, also provides drip-free and consistent coating.

Specifications

Size	ϕ18.9mm (Fluid body) x 63.2mm length
Weight	85g
Air cylinder body	SUS303
Diaphragm	UHMW*
Valve head	SUS303
Fluid outlet port	M5×0.8 female
Mounting hole	M4 female
Valve operating air pressure	0.4~0.62MPa
Maximum fluid pressure	0.48MPa

*Ultra High Molecular Weight

How the Valve Operates

Input air pressure retracts the diaphragm seal, permitting fluid to flow. (Figure 1)
Once the cycle is completed, the spring retracts the piston and the diaphragm closes to shut off the fluid. (Figure 2)

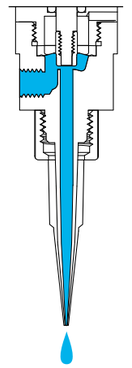


Figure 1

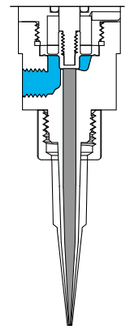


Figure 2

SV51

Faster response speed enables clear cut-off of the fluid

SV51 precision needle valve is designed to apply a small amount of low-viscosity fluids with accuracy and the unique packing structure of the valve contributes to superior durability.

Specifications

Size	φ26.9mm (Fluid body) x 113mm length
Weight	312g (except fluid inlet fitting part)
Air cylinder body	SUS303
Piston needle	SUS303
Needle packing	SUS303, Teflon
Fluid body	SUS303
Tip adapter	SUS303
Fluid outlet port	1/8NPT female
Mounting hole	M6 female
Valve operating air pressure	0.4~0.62MPa
Maximum fluid pressure	2.0MPa

How the Valve Operates

Input air pressure retracts the piston needle from the needle seat, permitting fluid to flow. (Figure 1)
Once the cycle is completed, the piston spring returns the piston needle back to its position in the dispensing tip to shut off the fluid. (Figure 2).

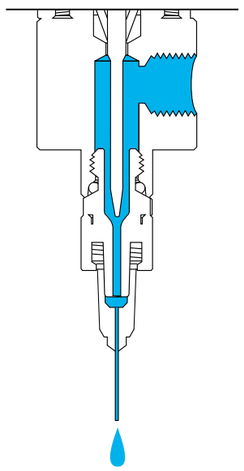


Figure 1

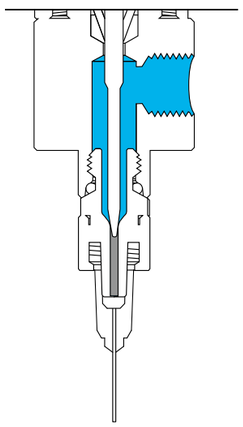


Figure 2

SV59MD

Consistent minimum volume dispensing for microdot application

SV59MD microdot dispense valve, with excellent high-speed driven, can apply small to extremely minute dots combined with an optional high-speed solenoid valve, which ensures precise and drip-free operation.

Specifications

Size	H79mm×φ27mm
Weight	213g (except fluid inlet fitting part)
Air cylinder	SUS303
Needle	SUS303
Needle packing	PTFE, FKM
Fluid chamber	SUS303, PTFE
Syringe fitting	SUS303, FKM、PP
Fluid inlet thread	M5
Valve operating air inlet thread	M6
Valve operating air pressure	0.4～0.62Mpa
Maximum fluid pressure	0.7Mpa
Dispensing tip	GP Needle tip 23G (ID:φ0.33mm)～33G(ID:φ0.11mm)

How the Valve Operates

Input air pressure retracts the piston needle from the hub of the dispensing tip, permitting fluid to flow. (Figure 1)
Once the cycle is completed, the piston spring returns the piston needle back to its position in the dispensing tip to shut off the fluid. (Figure 2).

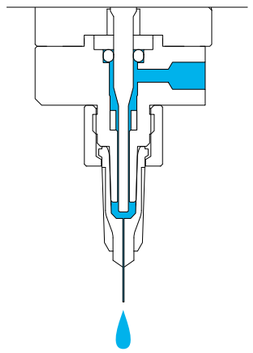


Figure 1

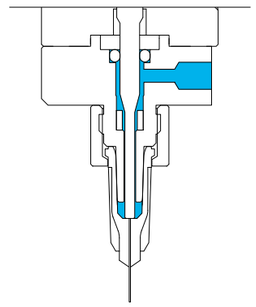


Figure 2

Valve controller SVC720V

Consistent, precise volume control for high precision dispensing valves

Features
- Parameters can be fine-tuned by digital display
- Faster response time
- Stabilized by internal precision regulator

SVC720V

SV35DA

Reliable shut off enhances accuracy and consistency for medium to thick fluids

SV35DA precision piston valve is designed to apply uniform dots and stripes of medium to thick fluids such as grease and silicone and a suck-back function prevents dripping. SV35DA features a unique UHMW polymer diaphragm sealing head that ensures longer, trouble-free operation.

Specifications

Size	ϕ28.5mm (Fluid body) × 141.0mm length
Weight	379g
Air cylinder body	SUS303
Diaphragm	UHMW*
Sealing head	SUS303、UHMW
Fluid body	SUS303
Tip adapter	Polypropylene
Output thread	1/8 NPT female
Fluid outlet port	1/4 NPT female
Mounting hole	M8 female
Valve operating air pressure	0.4~0.62MPa
Maximum fluid pressure	0.7MPa

*Ultra High Molecular Weight

How the Valve Operates

Input air pressure forces the sealing head to move down, permitting fluid to flow. (Figure 1)
Once the cycle is completed, the spring retracts the piston and the sealing head closes to shut off the fluid and pull back a slight amount of fluid to clearly cut it off. (Figure 2).

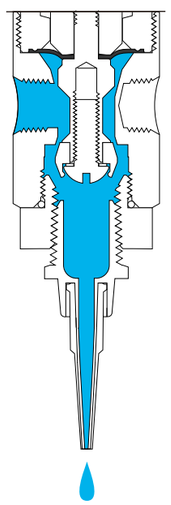


Figure 1

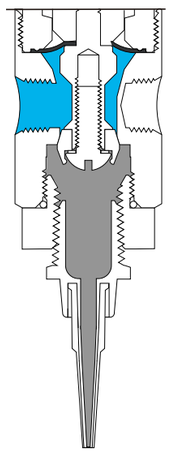


Figure 2

SV35HF

Fast and accurate filling process for low to high viscosity fluids

SV35HF piston valve is designed to consistently dispense middle to high viscosity materials SV35DA by achieving a higher and smoother flow rate rather than SV35DA, featuring a fast, clean cut-off that prevents dripping and drooling and excels in precision filling applications.

Specifications

Size	ϕ31.1mm (Fluid body) × 100.0mm length
Weight	333g
Air cylinder body	SUS303
Diaphragm	UHMW*
Sealing head	SUS303、UHMW
Fluid body	SUS303
Fluid inlet port	1/4 NPT female
Fluid outlet port	1/4 NPT female
Mounting hole	M8 female
Valve operating air pressure	0.4~0.62MPa
Maximum fluid pressure	0.7MPa

*Ultra High Molecular Weight

How the Valve Operates

Input air pressure forces the sealing head to move down, permitting fluid to flow. (Figure 1)
Once the cycle is completed, the spring retracts the piston and the sealing head closes to shut off the fluid and pull back a slight amount of fluid to clearly cut it off. (Figure 2)

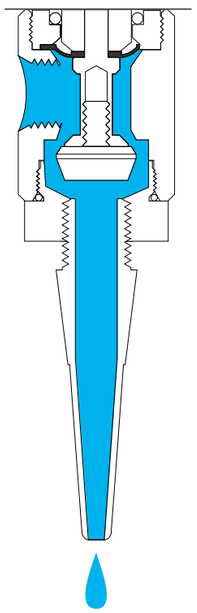


Figure 1

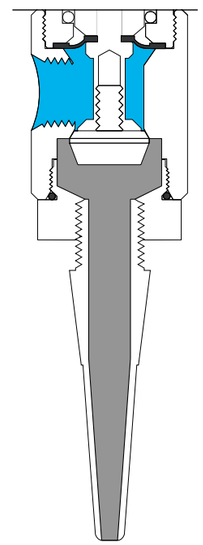


Figure 2

SV91

Low volume, low pressure spray coatings enable high transfer efficiency

SV91 spray valve is designed to provide consistent coating of low to medium viscosity fluids with low volume low pressure air without causing overspray or misting.
With the selection of the most appropriate nozzle, the spray quality can be perfectly controlled.

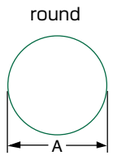
Specifications

Size	ϕ26.9mm (Fluid body) × 105mm length
Weight	294g
Air cylinder body	SUS303
Piston needle	SUS303
Needle packing	SUS303, Teflon
Fluid body	SUS303
Nozzle air cap	SUS303
Fluid inlet port	1/8NPT female
Mounting hole	M6 female
Valve operating air pressure	0.4~0.62MPa
Maximum nozzle air pressure	0.2MPa (Standard)
Maximum fluid pressure	2.0MPa
Free flow orifice (special)	#46、#28、#14

Spray Coverage Area

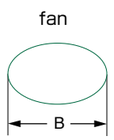
Round Pattern Spray Coverage (A)

Nozzle distance from surface	Nozzle size		
	#46	#28	#14
25mm	6mm	5mm	4mm
50mm	13mm	10mm	8mm
75mm	19mm	15mm	12mm
150mm	36mm	30mm	24mm



Fan Pattern Spray Coverage (B)

Nozzle distance from surface	Nozzle size			
	#46WF	#46F	#28F	#14F
25mm	40mm	25mm	10mm	8mm
50mm	60mm	40mm	20mm	16mm
75mm	80mm	50mm	30mm	24mm
150mm	165mm	80mm	60mm	50mm



How the Valve Operates

Input air pressure retracts the needle from the nozzle seat, allowing fluid to flow. At the same time, nozzle air flows around the nozzle and atomizes the fluid into fine droplets. (Figure 1)
Once the cycle is completed, the spring returns the piston needle back to its position to shut off the fluid. (Figure 2)

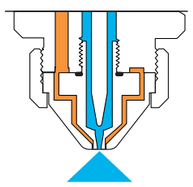


Figure 1

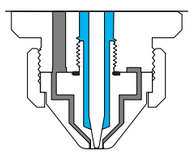


Figure 2

Spray valve Controller SVC620S

SVC620S provides low volume, low pressure fine spray coating driven by a solenoid and nozzle pressure.

Features
- Stackable exterior face
- Nozzle air delay function for reliable shut off
- Teaching function allows for spray volume adjustment

SVC620S

SV59MS

Ensuring thin-film spraying as small as 2 μm

SV59MS, precision micro spray valve, using a small gauge needle tip, enables fine spraying of low to medium viscosity fluid over a narrow area without scattering.

Specifications

Size	H91mm×ϕ27mm
Weight	280g (362g)※() with solenoid valve
Air cylinder	SUS303
Needle	SUS303
Needle packing	PTFE, FKM
Fluid chamber	SUS303, PTFE
Syringe fitting	SUS303, FKM、PP
Fluid inlet thread	M5
Valve operating air inlet thread	M6
Valve operating air pressure	0.4～0.62Mpa
Maximum fluid pressure	0.7Mpa
Dispensing tip	GP Needle tip 23G (ID:ϕ0.33mm)～33G(ID:ϕ0.11mm)

How the Valve Operates

Input air pressure retracts the piston needle from the hub of the dispensing tip, permitting fluid to flow. (Figure 1)
Once the cycle is completed, the spring returns the piston needle back to its position in the dispensing tip to shut off the fluid. (Figure 2).

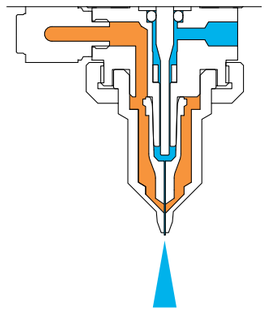


Figure 1

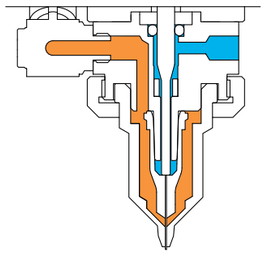


Figure 2

Spray valve Controller SVC620S

SVC620S provides low volume, low pressure fine spray coating driven by a solenoid and nozzle pressure.

Features
- Stackable exterior face
- Nozzle air delay function for reliable shut off
- Teaching function allows for spray volume adjustment

SVC620S

SV01S

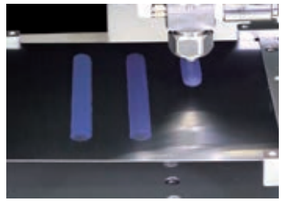
Precise coating for high viscosity materials without over spraying

Precision coating spray valve, SV01S, can apply materials with viscosity as high as 30,000 mPa·s. SV01S is ideally designed for applications of silicon, UV adhesive, or grease, which are likely causing splattering in dispensing.
Different type of nozzle and air can be used with the valve to optimize a spray pattern.

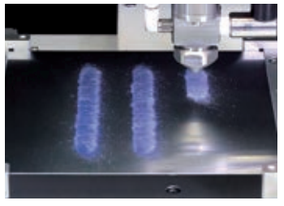
Specifications

Size	φ26.9mm (Fluid body) x 105mm length
Weight	312g
Air cylinder body	SUS303
Piston needle	SUS303
Needle packing	SUS303、Teflon®
Fluid body	SUS303
Nozzle / air cap	SUS303
Fluid inlet thread	1/8NPT female
Valve operating air inlet thread	M5×0.8 female
Nozzle air inlet thread	M5×0.8 female
Mounting	M6×1 tap hole
Valve operating air pressure	0.4～0.62MPa
Maximum nozzle air pressure	0.5MPa
Maximum fluid pressure	0.7MPa

* Fluid feeding part of stainless steel valve is passivation treated.

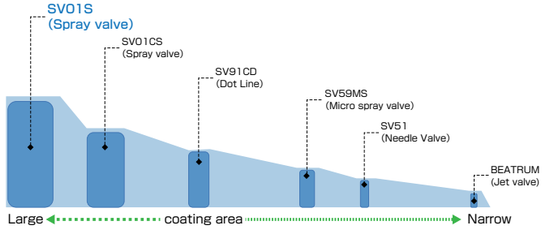


SV01S



conventional spray valve

Nozzle and Cap selection based on coating width



Spray valve Controller SVC620S

SVC620S provides low volume, low pressure fine spray coating driven by a solenoid and nozzle pressure.

Features
- Stackable exterior face
- Nozzle air delay function for reliable shut off
- Teaching function allows for spray volume adjustment

SVC620S

How the Valve Operates

Input air pressure retracts the needle from the nozzle seat, allowing fluid to flow. At the same time, nozzle air flows around the nozzle and atomizes the fluid into fine droplets. (Figure 1) Once the cycle is completed, the spring returns the piston needle back to its position to shut off the fluid. (Figure 2)

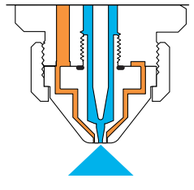


Figure 1

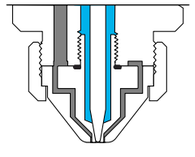


Figure 2

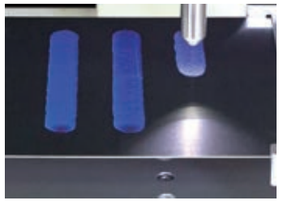
SV01CS

Precise coating for high viscosity materials without over spraying

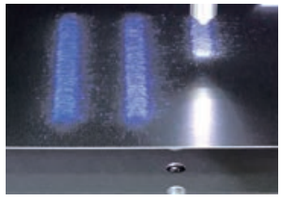
Precision coating spray valve, SV01CS, can apply materials with viscosity as high as 10,000mPa(s). SV01CS is ideally designed for application of non-solvent moisture-proof coating materials. The unique design of the valve tip allows for accessibility and application around tight, high mounted components.

Specifications

size	φ26.9 mm (fluid body) ×143 mm length
weight	312g
Air cylinder body	SUS303
Piston needle	SUS303
Needle packing	SUS303, Teflon®
fluid chamber/ extension	SUS303
Nozzle and air cap	SUS303
Fluid inlet thread	1/8NPT Female
Mounting hole	M6 Female
Valve operating air pressure	0.4～0.62MPa
Maximum nozzle air pressure	0.4MPa
Maximum fluid pressure	0.7MPa
Applicable nozzle (dedicated)	#04 #07 #11
Nozzle drying protection cap	Supplied as standard

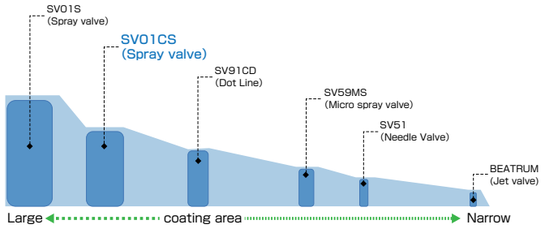


SV01CS



conventional spray valve

Nozzle and Cap selection based on coating width



Spray valve Controller SVC620S

SVC620S provides low volume, low pressure fine spray coating driven by a solenoid and nozzle pressure.

Features
- Stackable exterior face
- Nozzle air delay function for reliable shut off
- Teaching function allows for spray volume adjustment

SVC620S

How the Valve Operates

At the same time as (Figure 1), the nozzle air flows around the air cap to atomize the fluid into fine droplets. (Figure 2)
Once the cycle is completed, the spring returns the piston needle back to its position to shut off the fluid. (Figure 3)

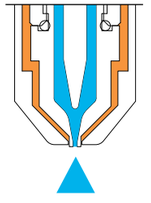


Figure 2

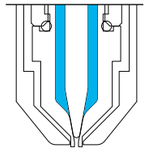
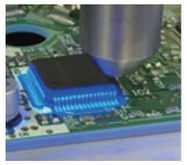


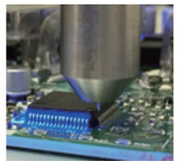
Figure 3

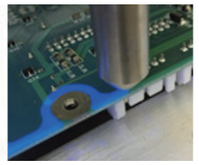
SV91CD

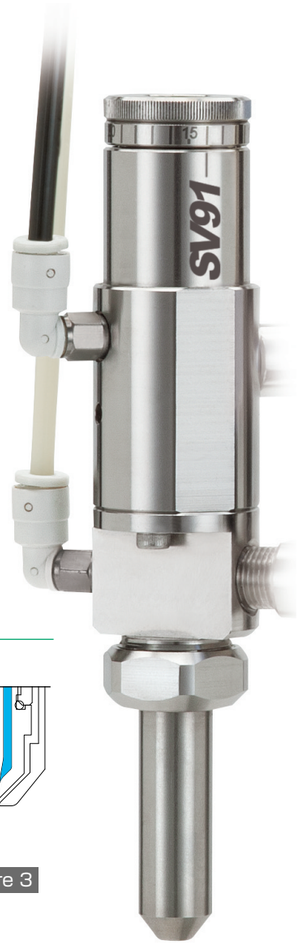
Non-contact dot, Spray Line, can be selected with one valve

SV91CD is designed to dispense conformal coating materials into three different patterns, “non-contact dot,” “spraying” or “line dispensing,” to properly cover a restricted area.


Non-contact dot dispensing in 5mm width


Spraying in 3mm width


Line dispensing in 2mm width



Specifications

Size	ϕ26.9mm (Fluid body) × 136.3mm length
Weight	312g
Air cylinder body	SUS303
Piston needle	SUS303
Needle packing	SUS303, Teflon
Fluid body / Extension	SUS303
Nozzle air cap	SUS303
Fluid outlet port	1/8NPT female
Mounting hole	M6 female
Valve operating air pressure	0.4~0.62MPa
Maximum nozzle air pressure	0.2MPa (Standard)
Maximum fluid pressure	0.7MPa
Free flow orifice (special)	#14

How the Valve Operates

<Non-contact dot dispensing>

Input air pressure retracts the piston needle from the nozzle seat, allowing fluid to flow. (Figure 1)
Piston needle’s instant shut-off creates non-contact dots. (Figure 3)

<Spraying>

At the same time as (Figure 1), the nozzle air flows around the air cap to atomize the fluid into fine droplets. (Figure 2)
Once the cycle is completed, the spring returns the piston needle back to its position to shut off the fluid. (Figure 3)

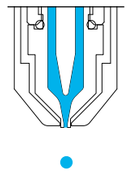


Figure 1

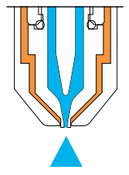


Figure 2

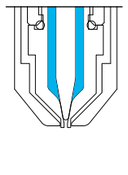


Figure 3

<Line dispensing>

Input air pressure retracts the piston needle from the nozzle seat, allowing fluid to flow to create a bead for the duration that it remains open. (Figure 1)
Once the cycle is completed, the spring returns the piston needle back to its position to shut off the fluid. (Figure 3)

Valve Controller SVC620CD specified for SV91CD

SVC620CD directly controls SV91CD to provide dot, spray or line dispensing patterns.

Features
- Faster response time
- Stabilized by internal precision regulator
- Both post and pre-nozzle air can be fine-tuned


SVC620CD


Solenoid valve SVEM720


Solenoid valve SVEM800

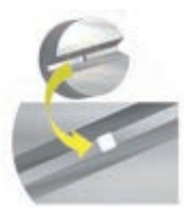
*Solenoid valve SVEM720 or SVEM800 should be used.

SV70

Precision conformal coating dispensing moisture-proof material into thin film patterns

SV70 conformal coating valve is designed to apply various patterns of moisture-proof materials coating on PCBs with a lower flow rate. With an innovatively designed square-cut nozzle, SV70 ensures superior stability without overspray, as well as a faster and drip-free dispensing process.


Spray pattern


Square-cut nozzle

Specifications

Size	ϕ26.9 (Fluid body) × 141.0mm
Weight	334g (except fluid inlet fitting part)
Air cylinder body	SUS303
Piston needle	SUS303
Needle packing	SUS303, Teflon
Fluid body / Extension	SUS303
Tip adapter	SUS303
Fluid outlet port	1/8NPT female
Mounting hole	M6
Valve operating air pressure	0.4~0.62MPa
Valve operating air pressure	0.7MPa
Free flow orifice (special)	#9、#6、#4

How the Valve Operates

Input air pressure retracts the piston needle from the nozzle seat, allowing fluid to flow. (Figure 1)
Once the cycle is completed, the piston spring returns the piston needle back to its position to shut off the fluid. (Figure 2).

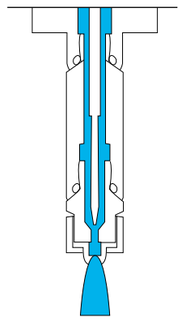


Figure 1

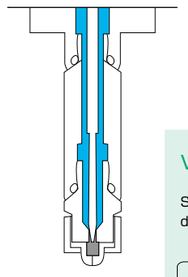
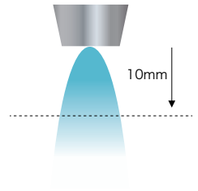


Figure 2

Spray Coverage Area

Nozzle distance from surface	Nozzle size		
	#9	#6	#4
10mm	18mm	11mm	8mm



Valve controller SVC720F

SVC720F directly controls SV70 with excellent high-speed response for maximium pneumatic solenoid dispensing performance.

Features
- Stackable squared design
- Fast response solenoid allows rapid production time
- Stabilized by internal precision regulator


SVC720F


Solenoid valve SVEM720


Solenoid valve SVEM800

*Solenoid valve SVEM720 or SVEM800 should be used.

SV46

High pressure spool valve for applying a neat bead of sealant and grease

SV46 is a pneumatic, balanced spool valve for consistent dispensing of industrial sealants, silicones and greases at input pressures up to 17.2MPa.

Specifications

Size	ϕ38.1mm (Fluid body) X 119.4mm length
Weight	728g
Fluid body and cap	Stainless steel
Air cylinder	Stainless steel
Air cylinder cap	Aluminium
Spool shaft	Stainless steel (hard chrome plate)
Upper/lower sealing	UHMW*, EPR
Fluid inlet port	3/8 NPT female
Fluid outlet port	1/4 NPT female
Aux air inlet	1/8 NPT female
Valve operating air pressure	0.48～0.62MPa
Maximum fluid pressure	17.2MPa

*Ultra High Molecular Weight

How the Valve Operates

Input air pressure retracts the spool shaft, allowing fluid to flow. (Figure 1)
Once the cycle is completed, the spring returns the spool shaft back to its original position to shut off the fluid. (Figure 2)

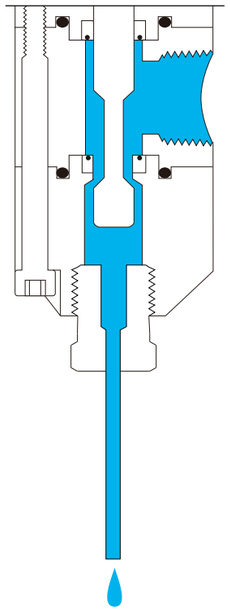


Figure 1

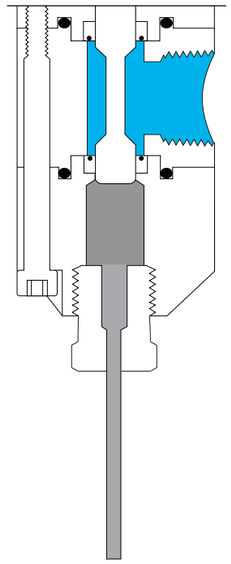


Figure 2

Standard Valve Controller

SVC720V

Consistent, precise volume control
for high precision dispensing valves

Spray valve controller

(specified for SV91, SV59MS)

SVC620S

All digital display ensures versatility
and flexibility for precise spray control

Coating dot valve controller

(specified for SV91CD)

SVC620CD

Solenoid valve
SVEM720

Solenoid valve
SVEM800

Non-contact dot, spray line
dispensing can be selected

*Solenoid valve SVEM720 or SVEM800 should be used.

Conformal coating valve controller

(specified for SV70)

SVC720F

Solenoid valve
SVEM720

Solenoid valve
SVEM800

Fast response pneumatic solenoid
maximizes dispensing performance

*Solenoid valve SVEM720 or SVEM800 should be used.

Specifications

	SVC720V	SVC620S	SVC620CD	SVC720F
Power	DC24V (VAC100-240 adapter)			
Power consumption	18W			
Air Input requirement	0.4MPa～0.7MPa			
Pressure setting range	0～0.50MPa (Valve operating pressure : more than 0.40MPa)			
Nozzle air pressure setting range	—	0～0.50MPa		—
Time setting range	0.005～999.9sec			
Start input	Footpedal, Band switch, signal for VDC5-24 (I/O)			
I/O	D-sub 9 pin connector			
Storage condition	5℃～40℃ (non-condensing)			
External dimensions ( ) including protruding portion	W250×D139(177)×H76(78)			W160×D139(176)×H76(78)
Weight	1.5kg		1.4kg	0.8kg
Accessories	AC adapter Foot pedal switch			

unit:mm

BEATRUM® ・BEATRUM-H

BEATRUM is a fast and high precision jet dispenser specifically for micro dispensing, equipped with a heater as standard, applying viscous materials ranging from low to high consistently.

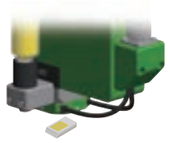
BETRUM-H is designed for precise jetting mid-to high viscosity materials just by exchanging a tip. Interchangeable striker seat part enables to apply various fluids such as silicone.

Specifications

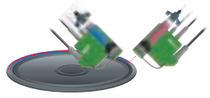
		Dispensing valve		Dispensing controller
model		SJVH7000	SJVH7000-H	SJVC7000
Size	W	53mm		250mm
	H	95mm		113mm
	D	106mm		188mm
Weight		650g		1800g
Speed		Up to 250Hz		
Min. dispensed width		ϕ0.3mm		
Power		VDC24 (AC100 ～ 240V adapter)		

Applications

Underfill, dam & fill, moisture-proof coating material, UV adhesive, grease, oil, silver paste, paint, ink, primer, solvent, etc.



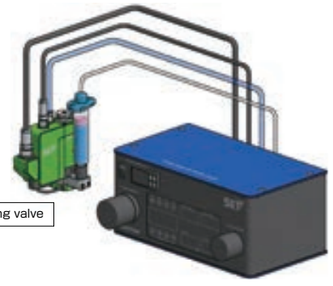
LED phosphor



Acrylic two-component adhesive

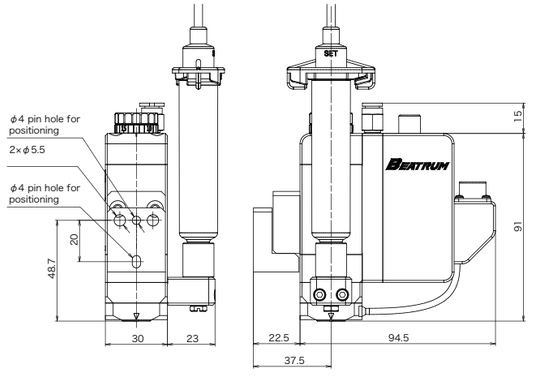
Grease

Diagram

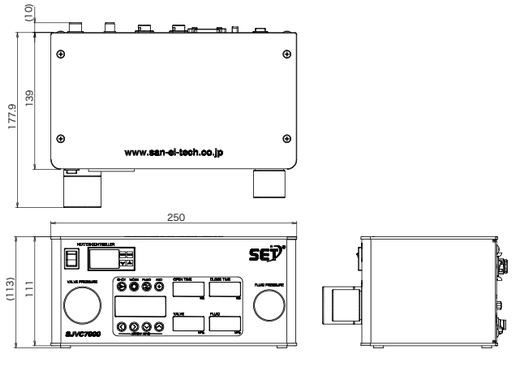


Dimensions

Dispensing valve



Dispensing controller



単位：mm

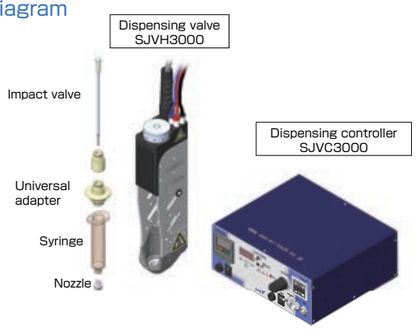
NOVADOT®

NOVADOT is a unique electromagnetic-driven jet dispenser providing high-speed delivery and exceptional volumetric control for various low to medium viscosity fluids. Combining controller programming with a temperature-controlled rigid dispensing head makes this system ideal for robotic applications.

Specifications

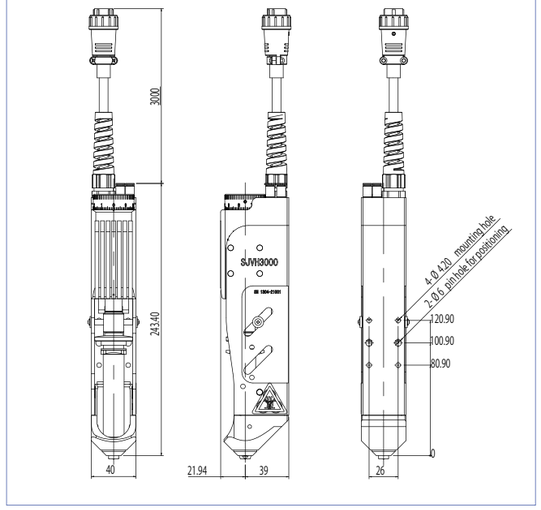
	Dispensing valve SJVH3000	Dispensing controller SJVC3000
Size mm (W×D×H)	40×61.0×244.0	250×220×107
Weight	720g	5700g
Power	100VAC、50/60Hz	
Input consumption current	3A/AC100V	
Muxmum inlet pressure	0.6MPa	
Viscosity range	1-50Pa･s (50kcps)	
Speed	Up to 100Hz (300Hz with an optional special engine)	
Nozzle heater	Heating up to 100℃ - Max	
Ambient operating condition	5℃～40℃ (non-condensing)	
Nozzle size (special)	0.11mm ～ 0.91mm	
Fluid syringes	5,10,30cc (55cc option)	
Input/Output	Dsub15 pin connector (Dsub25 pin connector/external time control)	

Diagram

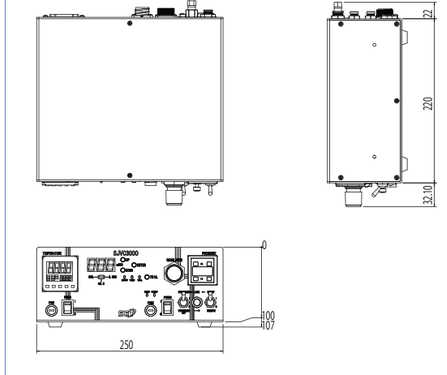


Dimensions

Dispensing valve with SJ nozzle attached



Dispensing controller



unit：mm

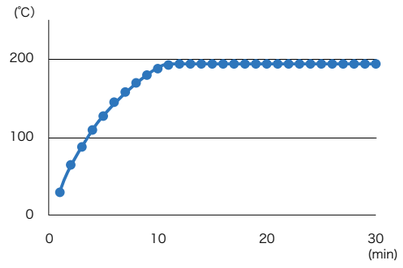
..NOVADOT-HM

NOVADOT-HM is specifically designed for precisely dispensing PUR material equipped with a heater that increases the temperature up to 200 ℃.
Excellent thermal efficiency and compatible with various PUR materials enhances precise non-contact dispensing for dot or bead application.

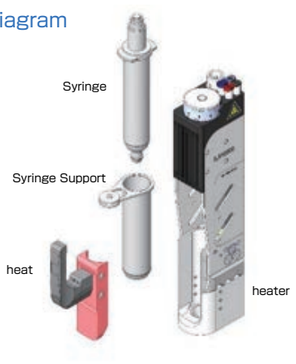
Specifications

Head	SJVH3000-HM
Size	W53mm×H278.5mm×D102.5mm
Weight	1,400g
Drive method	Electromagnetically driven
Engine cooling system	Air cooling (air consumption 30L/min)
Temperature control range	80 to 200℃
Heater module	Japanese rating: 100V 250W　Overseas rating: 240V 250W
Syringe to be applied	30cc High Temperature type
Nozzles to be applied	PJ needle, short needle, super short nozzle
Temperature control range	0 ～ 0.6Mpa (depending high temperature of using syringe)

Temperature data



Diagram

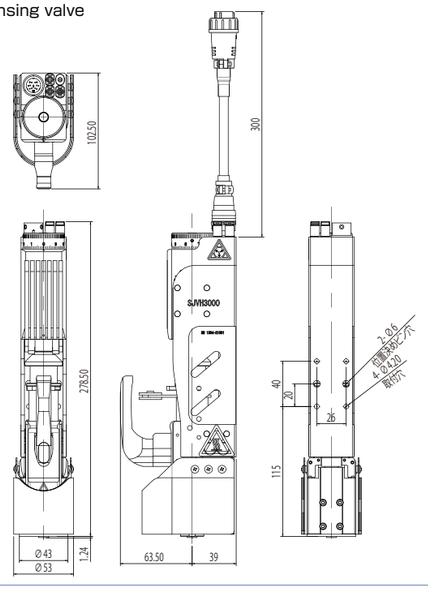


Hi-Temp Syringe (30cc)

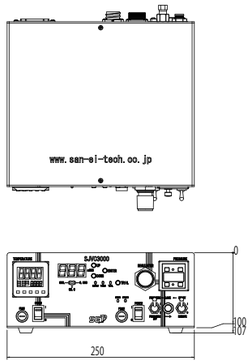
Hi-Temp type: SI-30LT
High temerature:180° C

Dimensions

Dispensing valve



Dispensing controller



unit : mm

Syringe filling equipment

Instant filling station to be placed near the operating area

Specification

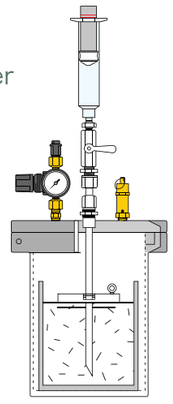
filling type	pressurized /downward filling
accuracy	+/- 2% (depending on a setting condition)
flow rate	up to 0.55 MPa
supplying pressure	0-0. 7MPa
power	VAC100-240
power consumption	100W
number of barrels to be filled	1 piece/cycle

Pressurized syringe filling system

Syringe filling fed with a 1-2 kg container

Specification

filling type	pressurized / downward filling
filling method	manual opening/ closing
supplying pressure	0-0.45MPa
power	not required
Number of barrels to be filled	1 piece / cycle



image

Manual loader

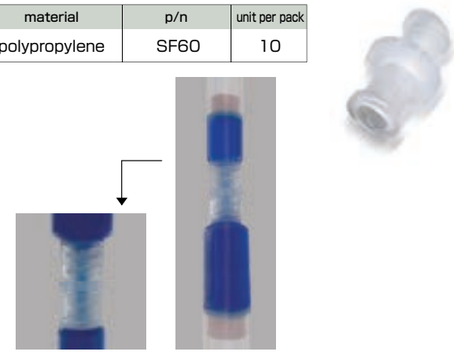
No power required to ensure easy operating

・simple structure for easy setting
・330ml cartridge container is available

Syringe filling adapter

Used with a mid to high viscosity fluid for dispensing into small size syringes (common to 3cc, 5cc, 10cc, 30cc, 55cc and 75cc)

material	p/n	unit per pack
polypropylene	SF60	10



Precision Automated Vision Dispensing System AXELIA
All-in-one dispensing solution for critical dispensing demands

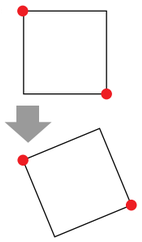
High precision automatic vision guided dispensing system AXA series, equipped with simple image processing features enables flexible and intuitive operation applied for various assembling processes that require high level of dispensing conditions.

Fluid Magic's advanced capabilities

Flexible motion control helps to extend the functions towards versatile applications.

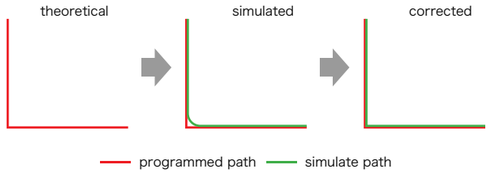
Block offset feature

Making global changes to batch or group of address in a program only by selecting two points in X, Y, and theta directions allows for faster programming.



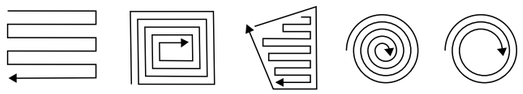
Pre-dispense simulate path feature

Provides user the ability to visually review dispensing programmed path and estimated cycle speed before running actual program.



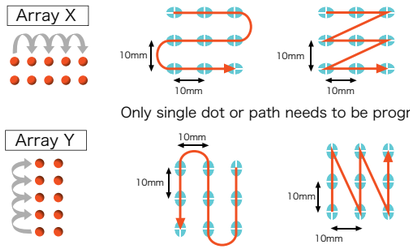
Encapsulation feature

Few, easy steps allows users define area, shape and coverage to be filled.
Program command enables easy adjustment to fine-tune dispensing parameters to be filled.



Automatic array repeat feature

Automatically duplicates a single dispensing dot or path points into multiple within a grid pattern in X or Y direction.



Simple Vision teaching through searching & pointing

All steps of the programming process can be visually steered for precise calibration and offsets.

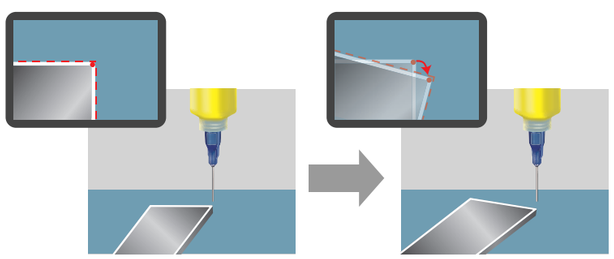


Image alignment feature

Dual references for fiducial marks in X / Y align entire part and adjust all dispense points in program

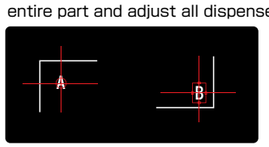
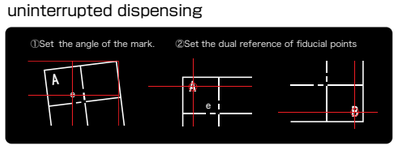
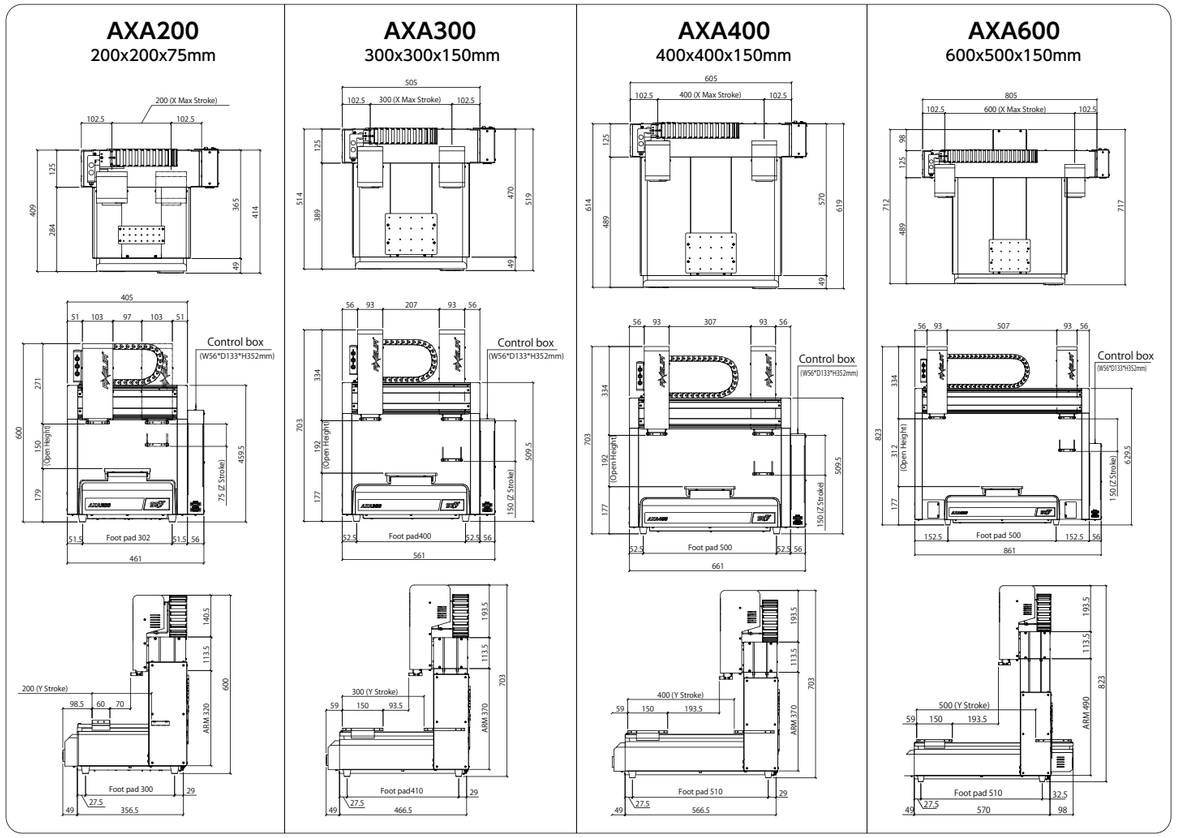


Image correction feature

Angle correction allows identification of part orientation and changes programing from original for seamless uninterrupted dispensing



Lineup



Specifications　Vision System-ADVANCED (3 Axis)

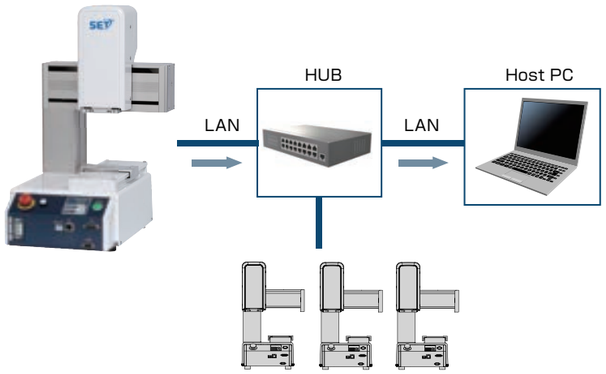
Item		AXA200	AXA300	AXA400	AXA600
Number of Axis		3 Axis			
Operating Range	X & Y Axis	200 / 200	300 / 300	400 / 400	600 / 500
	Z Axis	75mm	150mm		
Maximum Portable Load	X Axis (Tool)	3KG	5KG		
	Y Axis (Workpiece)	10KG			
Maximum Speed (PTP Drive)	X Axis	500 mm/sec	800 mm/sec		
	Y Axis	500 mm/sec	800 mm/sec		
	Z Axis	200 mm/sec	320 mm/sec		
Repeatability (Robot)	X, Y, Z Axis	± 0.008mm			
Data Storage		PC storage			
Interpolation		3 axes (3D space)			
	Languages	English (Standard), Japanese			
Drive Movement		PTP & CP			
External Input/Output	I/O	32 inputs / 32 outputs			
Tip Detection System		Optional (Contact type)			
Vision	Camera	USB-standard vision / CCD-High-precesion			
	Lens	Included			
	Lighting	Included			
Power Supply		Auto-switching AC100-240V 50/60Hz			
Operating Environment	Temperature	10 ～ 40℃			
	Relative Humidity	20 ～ 90% (non condensing)			
	Liner Guide	Single LM Guide			
	Drive Method	XY Axis / 3-Phase Micro Stepping Motor / Synchronous belt Z Axis / 3-Phase Micro Stepping Motor / Precision Ball Screw			

Increased structural rigidity, faster speed and well-enhanced communication capability, ready for manufacturing processes aimed at IoT

The SR Series is a multifunction robot designed with both cell production sites and automated inline installation in mind. The Ethernet (LAN) is included as standard equipment and the faster speed up to 900mm/sec ensures greater output on production lines.

Increased communication capability

A LAN port included as standard equipment allows users to control several robots from one PC.



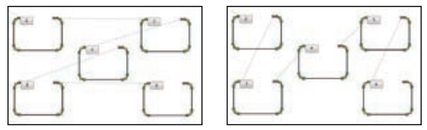
PC software “JR C-points Ⅱ” (optional)

“JR C-points Ⅱ” is application software which allows users to create, edit and save teaching and customizing data all on a PC, as well as set points and create and edit point commands more smoothly.

NEW Point graphic editing function screen

Create path data based on DXF, Gerber or JPEG background image data and optimize programming potential by using several different functions to create even better teaching data.

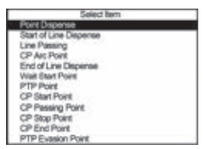
Point order sorting function (shorter tact times)



Easy Teaching

Using the dedicated dispensing application software, all you need to do is select the positions where you want the needle tip to go (point) and dispense. (10 different display languages)

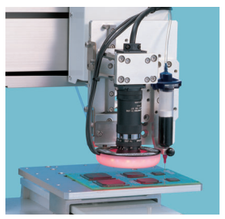
Point values setting screen



Point type selection screen

Easy camera system installation

With such functions as automatic calibration or CCD camera adjustment, it is easy to create a comprehensive machine vision system package just through COM ports (COM1 is installed as a standard).



Lineup 3-Axis type

SRS-S203

SRS-S303

SRS-S403

SRS-S503

Specifications

Item		Model	3-Axis type (synchronous control)					4-Axis type (synchronous control)				
			S203	S303	S403	S503	S603	S204	S304	S404	S504	S604
Operation range	X & Y Axes (mm)		200×200	300×320	400×400	510×510	510×620	200X200	300X320	400X400	510X510	510X620
	Z Axes (mm)		50	100	150	150	150	50	100	150	150	150
	R Axes (°)		—					±360°				
Portable weight	X Axes (Workpiece) (kg)		7	15	15	15	15	7	15			
	Y Axes (Tool) (kg)		3.5	7	7	7	7	3.5	7			
Maximum speed (PTP)*1	X & Y Axes (mm/sec)		7~700	9~900	9~900	9~900	9~900	7~700	9~900			
	Z Axes (mm/sec)		2.5~250	4~400	4~400	4~400	4~400	2.5~250	4~400			
	R Axes (° /sec)		—					6~600	9~900			
Maximum speed (CP)*1	XYZ combined (mm/sec)		0.1~600	0.1~850	0.1~850	0.1~850	0.1~850	0.1~600	0.1~850			
R axis allowable moment of inertia			—					65kg·cm²	90kg·cm²			
Repeatability*2	X & Y Axes (mm)		±0.006	±0.007	±0.007	±0.008	X:±0.008 Y:±0.01	±0.01				
	Z Axes (mm)		±0.006	±0.007	±0.007	±0.008	±0.008	±0.01				
	R Axes (°)		—					±0.08				
Dimensions W×D×H (Excluding protrusions) (mm)*3			323×387×554	560×535×659	584×631×807	678×731×807	790×731×807	323x387x676	560x535x844	584x631x894	678x731x894	790x731x894
Body weight (kg)			20	35	42	44	45	22	38	46	47	48
Power source			AC90~125V / AC180~240 (single-phase)									
Power consumption			200W									
Drive method			5 Phase Pulse Motor									
Teaching system, type			・Easy, common teaching system using the original software. ・Direct teaching with Teaching pendant (option). ・Offline teaching with PC (option) by PC utilizing patterns created in CAD or other formats.									
Program capacity			999 programs									
Database capacity*4			Maximum32,000 points									
Simple PLC functions			Up to 100 programs, with up to 1,000 steps/program									
External interface	Standard	I/O-SYS	16 Inputs/ 16 Outputs									
		COM1	RS232C (for external devices, COM commands)									
		MEMORY	USB memory connector (save and readout teaching and customizing data, backup system software)									
		LAN	Ethernet connector for PC (connect to PC software, operate the robot using control commands)									
	Options	I/O-1	8 Inputs/ 8 Outputs (including 4 relay outputs) (Optional)									
		I/O-MT	Controls up to 2 external motors (Optional)									
		I/O-S	Interlock connector for an area sensor, etc. (Optional)									
		Fieldbus	CC-Link / DeviceNet / PROFIBUS (Optional)									
		COM2・COM3	RS232C (for external devices) (Optional)									

*1 : Maximum speed can very depending upon conditions.
*2 : Repeatability was measured at a constant temperature and does not represent a guarantee of absolute precision.
*3 : SRS-S403 Double Column Type have different outer domensions and weights.
*4 : Point data memory capacity reduces as addictional function data settings/point job data/squencer data are added, due to the shared data storage area.

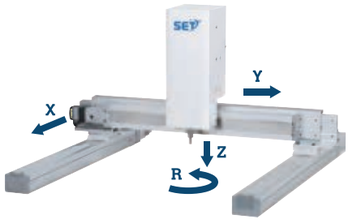
Cartesian robot extends versatility and flexibility in various applications

SCR series is simple and multifunctional cartesian robots, configured with 3-axis / 4-axis type, operated by the specified controller.
Easy programming teach system with camera functions installed can save set-up time substantially.

Lineup

Single Sided Type

Double Sided Type



4 Axes Specifications

Specifications

Item		3 Axes Single Sided	3 Axes Double Sided	4 Axes Double Sided
Control Axes Directions		3 (XYZ)		4 (XYZR)
Stroke	X-Axis Stroke in 100mm Increments	200/300/400/500/600	300/400/500/600	300/400/500/600
	Y-Axis Stroke (mm)	200/300	200/300/400/500	200/300/400/500
	Z-Axis Stroke (mm)	50/100/150/200	50/100/150/200/300	100/150
	R-Axis Stroke (deg)	N/A	N/A	±360
Drive Motor		Stepping Motor		Stepping Motor
		X, Y, Z Axes (Feedback Control)		X, Y Axes (Feedback Control) Z, R Axes (Open Loop Control)
Maximum Portable Load (kg)		4	8	3
Max. Speed (PTP Drive) *1	X-Axis Stroke	200~400 / 500/600	300/400 / 500/600	300/400 / 500/600
	X-Axis (mm/sec)	700 / 800	700 / 800	700 / 800
	Y-Axis (mm/sec)	800		800
	Z-Axis (mm/sec)	400		400
	R-Axis (deg/sec)	N/A		900
R-Axis Acceptable Moment of Inertia (kg/cm²)		N/A		90
Repeatability *2	X, Y-Axis (mm)	±0.02		±0.02
	Z-Axis (mm)	±0.02		±0.01
	R-Axis (deg)	N/A		±0.008
External Dimensions (mm) (excl. cables and protrusions)	Robot	W : Y-Axis Stroke + 319mm D : X-Axis Stroke + 309mm H : Z-Axis Stroke + 357mm	W : Y-Axis Stroke + 426mm D : X-Axis Stroke + 309mm H : Z-Axis Stroke + 357mm	W : Y-Axis Stroke + 426mm D : X-Axis Stroke + 309mm H : Z-Axis Stroke + 334mm
	Controller	W170×D310×H300		W170×D310×H300
Control Method		PTP (Point to Point), CP (Continuous Path)		
Interpolation		3-dimensional linear and arc interpolation		
Teaching Method		Remote Teaching (JOG), Manual Data Input (MDI)		
Teaching Pattern		Direct teaching using optional teaching pendant; Offline teaching using JR C-Points II (optional PC Software) via PC: CAD Data (DXF, Gerber, jpeg) compatible		
Screen Display Options	Measurement Unit	mm, inch		
	Language	English, Japanese, German, Italian, Spanish, French, Korean, Simplified Chinese, Traditional Chinese, Czech, Vietnamese		
Program Capacity		Maximum 999 Programs		
Database Capacity *3		Maximum 32,000 Points		
Simple PLC Function		Maximum 100 Programs (Maximum 1,000 steps/program)		
External Input/Output	I/O-SYS	16 Inputs/ 16 Outputs		
	I/O-1	8 Inputs/ 8 Outputs		
	I/O-MT	Motor Control, Auxiliary Axes 2 Channels (Optional)		
	Fieldbus	CC-Link/DeviceNet/PROFIBUS/PROFINET/CANopen/EtherNet/IP (Optional)		
	COM Port (RS232C)	COM1, COM2, COM3 (for connecting to external devices)		
	EMG OUT	Emergency Stop Signal Input (for connecting to an external safety circuit; set up by the end-user)		
	MEMORY	USB Memory Connector (for saving and reading out teaching & customizing data, and for upgrading system software)		
	LAN	PC Connector via the Ethernet (for robot control via control commands and for connection to JR C-Points II PC software)		
Power Supply *4		AC90~240V (single phase) 50/60Hz + external DC48V (depending upon facility supply)		
Power Consumption		150W (AC power supply), 300W (DC48V, motor drive power supply)		
Operating Environment Temperature		0~40°C		
Relative Humidity		20~85% (non condensing)		
Storage Temperature		-10°C~50°C		

<Notes>

*1 This value reflects the maximum portable load when measured with all the axes assembled. For details about acceleration rates, please contact us or visit our website.
Maximum speed may be unreachable depending upon the tool attachment setup. The X and Y axes individual unit speed and acceleration are 800mm/s and 5000mm/s² respectively.

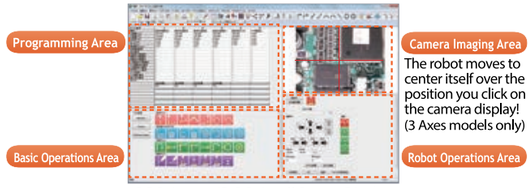
*2 Position repeatability is measured for each axis at a constant temperature, so absolute precision is not guaranteed.

*3 Point memory capacity reduces as additional function data/point job data/sequencer data are added, due to the shared data storage area.

*4 Please prepare a power supply of AC100V/200V or DC48V on your side.

USB Camera Teaching (PC Software JR C-Points II)

By connecting a store-bought USB camera* to your PC, you can display enlarged images on your PC and set program points. Select movements using the icons for simple, accurate teaching.



PC Software JR C-Points II Screen Display

For information about compatible USB cameras, please contact us.

4 Axes Specifications

Through the synchronous control of 4 axes, jobs which are difficult for a 3 axes robot such as dispensing or soldering on the wall of a cylindrical workpiece become much easier. Adding a 4th axis opens the door to even greater manufacturing possibilities.

Dispensing with 4 Axes

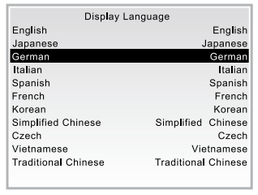
I/O-MT Function for up to 2 Additional Motors (Optional)

Teach up to 2 external pulse string input motors the same as with the robot axes to control an elevated angular motor axis or control a conveyor for transporting workpieces.

An example using the I/O-MT
Here is a 4 axes robot with a motor attached for changing the dispensing syringe angle.

Multilingual Teaching Display

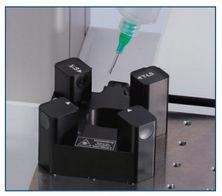
Switch freely among 11 different languages on the teaching pendant display.



Display Language Changing Screen

Needle Adjuster (Dispensing Specs Only)

When replacing a syringe or needle tip in the Dispensing Specifications, this function detects the amount of displacement from the original needle tip position and makes a position adjustment. Set up a simple adjustment program once, run it after needle replacement and it makes adjustments automatically. This function is usable with both 3 and 4 axes types.



4 Axes Needle Adjuster

AUTOTUBE®

AUTOTUBE system allows users to directly dispense a tube or a cartridge-type material like a silicon adhesive using a special container with air pressure instead of refilling it to other containers. The material can be dispensed without causing air bubbles and an operator can handle the operation without hand fatigue.

Specifications

	ATD200CW-B	ATD300CB-B
		
Dispensing controller	SDP400	
AC adapter	SD314	
Foot pedal switch	FTSW001 (2.4m code)	
Consumable parts	Taper tip (5 types for each size x 10) Retaining cap (10) Big taper tip : 880012A(2)*1	
Reservoir set	100/200g Tube holder : SAR20RAT 100/200g Retaining cap : SAR20RC Air hose : SAR59	330g Outer reservoir set : 580091 (with end cap and air hose)
Tip adapter	7514-2 · Tip adapter for big taper tip : 7514-2PA*2	
Adapter*3	880001A · 880001B (for each size x 2)	880003A · 880003B

*Both 1 and 2 are included only in ATD300CB, ATD300CPB-S *3 : Please contact us about different thread sizes for tube materials and adaptors from fluid material manufacturers.

■ ATD300CV-DAB
AUTOTUBE set with dispensing valve

Combination with a dispensing valve provides better consistency and accuracy in fluid dispensing for an automation process.

Valve Controller SVC720V

Table-top robot SR Series

■ SF60 Adapter for fluid filling

This adapter allows for easily transferring the material inside the reservoir into a separate syringe.

Peltier auto-tuned syringe temperature controller maintains uniform temperature

Peltier Syringe Temperature Control Unit precisely controls temperature of the syringe which enables the fluid to reach the setting temperature in a very short time and maintain a uniform temperature for consistent dispensing.

Temperature control block for syringe

Controller SPC100

Specifications

Part number	SPC100	SPB-3	SPB-5	SPB-10	SPB-30
Type	Controller	Peltier temperature control block 3cc	Peltier temperature control block 5cc	Peltier temperature control block 10cc	Peltier temperature control block 30cc
Power	AC100V ~ AC240V *Power cable needs to be prepared if the unit is used outside Japan. about 35W				
Power rating	about 35W				
Heat radiation	Heat sink + Fan type				
Temperature setting rang	20-60 ℃ (at the environmental temperature of 20-25℃)				
Accuracy	±0.1℃*1				
Selectable syringe size	3cc ／ 5cc ／ 10cc ／ 30cc syringe				
Selectable nozzles	GP needle tip (20-32G, 6.4mm length) *Please contact us if Precision nozzle or Metal nozzle are preferred.				
Dimensions ( ) including protrusions	W160×D242×H90mm (163.3) (263.5) (94.4)	W40×D64×H77mm (79)	W40×D68×H73mm (79)	W40× D68 × H93mm (79)	W46×D76×H121mm (82)
Weight	2.4kg	300g	300g	310g	420g
Accessories	power cable (2M)*2 , junction cable (2M)				

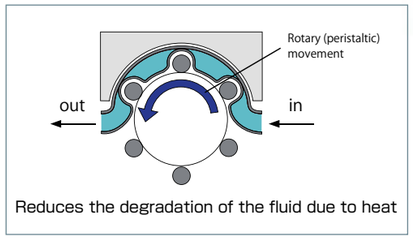
*1 : Measured at environmental temperature at25℃ (tested fluid: water)
*2 : forAC100V, domestic use.

SRD250

Unique rotary mechanism applies a minute amount of instantaneous material

SRD250 is designed to apply various materials such as instant adhesives (cyanoacrylates), thread-locking fluids, anaerobic adhesives, solvents or medical fluids with rotary (peristaltic) movement instead of using pneumatic pressure and generates few air bubbles in the fluid, which is ideal for applications including consistent fluid dispensing, transferring and filling.

- Reduces stress on fluid feed tubes extending tube life
- Less heat transfer because of the rotary mechanical part



Reduces the degradation of the fluid due to heat

PTFE tubing chart

Size material: PTFE/ length: 10m (394″)			
	IDmm	ODmm	Thickness mm
AWG-11	2.41 (.095″)	3.01 (.119″)	0.30 (.012″)
AWG-13	1.93 (.076″)	2.53 (.100″)	0.30 (.012″)
AWG-16	1.35 (.053″)	1.95 (.077″)	0.30 (.012″)
AWG-19*	0.96 (.038″)	1.56 (.061″)	0.30 (.012″)
AWG-24	0.56 (.022″)	1.06 (.042″)	0.25 (.009″)
AWG-26	0.46 (.018″)	0.92 (.036″)	0.23(.009″)
AWG-28	0.38 (.015″)	0.84 (.033″)	0.23 (.009″)

*The above specifications may change lot by lot.
*AWG-11-19 is used as a standard. Please contact us if you use other than AWG-11-19.

Silicon tubing chart

Size length: 10m (394″)			
	IDmm	ODmm	Thickness mm
silicon 3×5 mm	3.0 (0.12″)	5.0 (0.20″)	1.0 (0.04″)
silicon 2×4 mm	2.0 (0.08″)	4.0 (0.16″)	1.0 (0.04″)
silicon 1×3 mm	1.0 (0.04″)	3.0 (0.12″)	1.0 (0.04″)

Please contact us if you use a size different from above.

Tubing specification

PTFE	suited for cyanoacrylate or anaerobic adhesive
Silicon	more fluid flow can be obtained than Teflon tube

Specifications

Power supply	VDC24V (VAC100-240 adapter included)
Power consumption	Approximately 15W
Rotating speed (maximum)	0.5~240 RPM is adjustable with dial Note1
Mode setting	continuous operation/timer/counter Note2
Dispensing timer	0.01sec ~ 999hour (switching : sec. minute. hour)
Counter setting	1~99999
Vacuum timer	Adjustable : 0.001~9999sec
Interval timer	Adjustable : 0.001~9999sec
Applicable viscosity*1	PTFE tube 1 ~ 2,000m cps Silicon tube 1 ~ 5,000m cps
Outer dimension ( )including protrusions	W109×D167(174)×H138(139)mm
Interface	RS-232C (D-Sub 9 pin male) Note3
Weight	Approximately 2.2kg
Option	・Pen type dispenser with finger switch(SRD-P-0019) *for AWG-19 (standard) ・Foot switch (SRD-FS) ・PTFE tubes (10M per each) ・Silicon tubes (10M per each)

*1: Applicable viscosity is noted just for reference. Please note that figures may not be used depending on the property or the conditions of the fluid. *2: AWG-11-19 are generally used for the tube unless there are particular instructions. *3: Please use the tubes that are originally instructed from us.
Note1: Either RPM or PPS is selectable for speed setting. Note2: Counter mode is controlled by the number of passing of rotating disc slit (10/1 rotation) attached to motor shaft. Note3: Straight type is only available for connection cable.

Constant Tank Pressure ensures controlled feeding for adhesives, oils, greases, solvents, etc.

Top-port type (standard)

Standard tanks are made of stainless-steel and are designed to handle up to a 5 liter bottle or a fluid cartridge. Bottles or cartridges are placed directly inside the tanks and pressurized with a controlled and constant pressure to feed the fluid out of the top fluid port.
The bottles or cartridges can be easily replaced and the time for cleaning can be drastically reduced as the dispensed fluids never wet the inside of the tank.

Bottom-port type

This type of tank is also made of stainless-steel and can hold up to a 10 liter bottle. The tank is pressurized so that fluids can be fed out of the bottom port. Highly polished inner and outer surfaces of the tank minimize the build-up of residue, which results in clean dispensing stations.

Tank specification

	Part number	Volume	Weight
Standard type	SFTF-191027	2L	4.0kg
	SFTF-191225	3L	5.5kg
	SFTF-191525	5L	7.0kg
	SFTF-192035	10L	17.0kg
Bottom-port type	SFTR-191221	3L	5.0kg
	SFTR-191525	5L	6.5kg
	SFTR-192028	10L	11.0kg

*Optional parts

Regulator	0.7MPa maximum, 0.2MPa maximum
Relief valve	brass or stainless-steel
Fluid feeding pipe	pierced fitting for fluid feeding or suction pipe made of SUS
O-ring	NBR VITON, EPDM, Teflon

*Other configurations can be customized.
Level gauge, level sensor, stirring system, inner-polishing, etc, can be added. Specialized larger or smaller tanks, and tanks for syringe filling can be manufactured.

High precision with even, uniform lubricant coatings that remarkably improve productivity

LUBEMATE system applies lubricant coatings as fine, even films of fluid without overspraying, splashing or misting ensuring complete coverage especially for cutting tool operations with a matal stamping machine.

- A very small profile spray valve, LM87 easily retrofits to existing machines
- Increases accuracy especially for very small volumes of oil coating
- One controller can adjust up to 8 valves
- LM87-WF mounted on feedstock can be applied up to a maximum width of 165mm
- Drastically reduces both production costs and lubricant consumption
- Prolongs the sharpening period of die

Applications (high speed stamping)

- Lead frames
- Connector pins
- Motor cores
- Can end pull tabs
- Battery components
- Heat exchangers: forming of cooling fins
- Automobile parts
- Timepiece components
- Mobile device components

LUBEMATE applies a variety of fluid coating

Product specification Spray LM87 series

Size (mm)	65.8(H)×46.2(W)
Weight	263g
Fluid body	SUS303
Needle, Nozzle	SUS303
Air cap	SUS303
Diaphragm	PTFE、FKM
Fluid inlet	1/8NPT female
Mounting hole	M6 Tap hole

Controller LMC380

Size (mm)	143(W)×220(D)×269(H)
Weight	5.9kg(8 valves specified)
Input air pressure	0.4~0.6MPa
Tank pressure	0.12~0.3MPa
Nozzle air	0~0.2MPa

LUBEMATE System Controller LMC380

LUBEMATE System Controller LMC380 widely controls the volume of coating fluids from minute to large. The dispensed volume can be adjusted even while the system is running, which is especially advantageous for an intermittent dispensing process.
One controller is capable of driving up to eight valves.

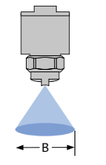
(6CH Type)

Spray Coverage Area

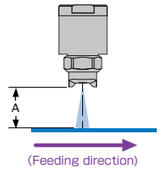
Spray valves	LM87	LM87-WF (Wide-fan type)
A Nozzle distance	B Spray diameter (typical)	
25	25	40
50	40	65
75	50	80
150	80	165

unit : mm

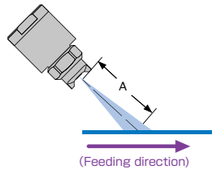
Nozzle direction (front)



Valve perpendicularly positioned

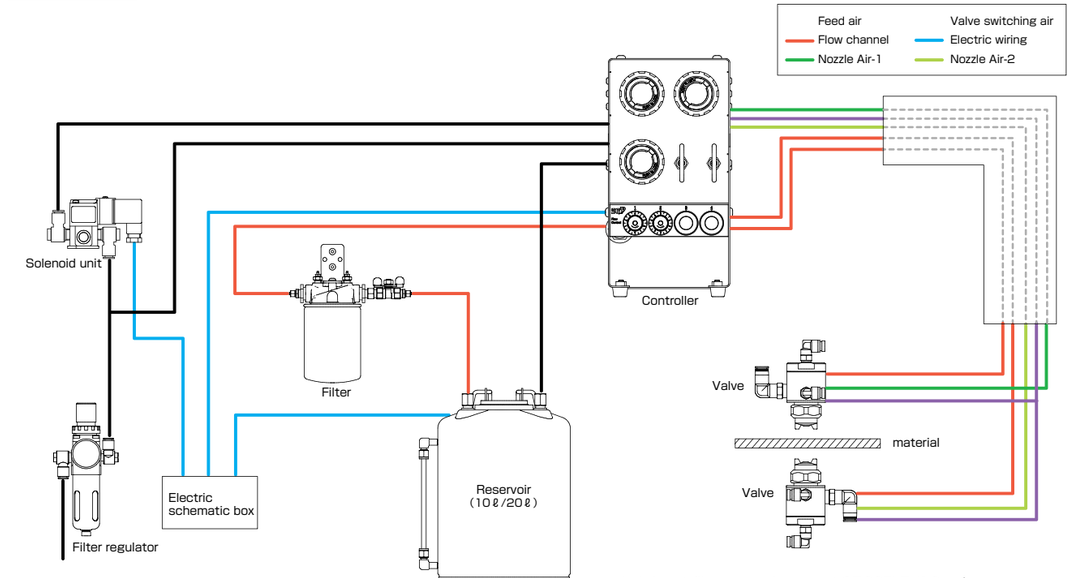


Valve tilted at 45°angle



Wider area can be sprayed when the valve is tilted

Diagram



*Drawing for 2ch connection

Lubricant filter as replacement 8500FLT (10μm)
For high viscosity lubricants, may require use of filter assembly (100μm)