

Wide range of components available for specific application needs

Dispensing Components by S.E.T.

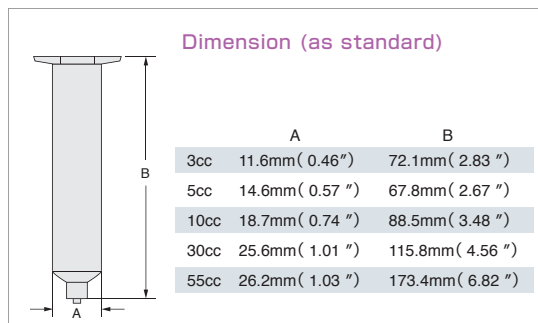
S.E.T. dispensing components, precision molded and easy to use, for the most accurate dispensing result with high product quality

Syringes

Precision fit between engineered 0° taper syringe and double-wiper piston ensures consistent fluid deposits.

Size	clear ^①	UV-block ^②	sets per box
3cc	SH09LL-B	SH09LB-B	50
5cc	SH10LL-B	SH10LB-B	40
10cc	SH11LL-B	SH11LB-B	30
30cc	SH12LL-B	SH12LB-B	20
55cc	SH13LL-B	SH13LB-B	15

material: polypropylene



- ① Clear syringe for most fluids
- ② 220-500nm UV block for light sensitive fluids

Pistons

Low-friction PE piston prevents drip or ooze.

Size	pink ^① (double wiper)	yellow ^② (flat wall)	sets per box
3cc	SH09PEP-B	SH09SPEY-B	50
5cc	SH10PEP-B	SH10SPEY-B	40
10cc	SH11PEP-B	SH11SPEY-B	30
30cc/55cc	SH12PEP-B	SH12SPEY-B	20

material: polyethylene



Syringe / Piston sets

Both syringes and pistons are packed as a set.

Size	clear	UV-block	sets per box
3cc	SH09CPP-B	SH09LBPP-B	50
5cc	SH10CPP-B	SH10LBPP-B	40
10cc	SH11CPP-B	SH11LBPP-B	30
30cc	SH12CPP-B	SH12LBPP-B	20
55cc	SH13CPP-B	SH13LBPP-B	15

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



Tip cap

Luer lock thread ensures safe, positive attachment keeping from leaking or slipping off.

Size	part number	sets per box
one size	SH13G-B	50

material: polypropylene



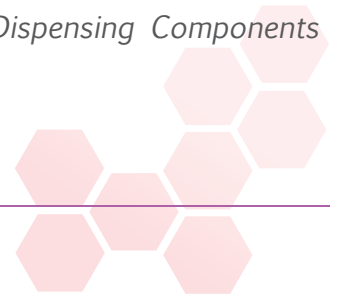
End caps

Unique snap-on design ensures easy, secure attachment.

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

material: polyethylene





Adapter assemblies

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

Size	①4.0mm(0.16")dia. tube 0.9m(35.43")	①4.0mm(0.16")dia. tube 1.8m(70.87")	②6.0mm(0.24")dia. tube 0.9m(35.43")	②6.0mm(0.24")dia. tube 1.8m(70.87")	③4.0mm(0.16")dia. tube for metal connector	④6.0mm(0.24")dia. tube for metal connector	sets per box
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
30/55cc	1000BSH52	1000BSH52-6	1000DSH52	1000DSH52-6	1000BSH52-ST	1000DSH52-ST	1

Material: polyacetal (adapter), polyurethane (tubing), BUNA (O-ring)



O-ring for replacement (for adapters)

Standard BUNA O-ring is suitable for a wide range of fluids and applications.
 VITON or EPR O-ring may be selected for use with solvents or other reactive fluids.

Size	BUNA nitrile rubber	VITON fluorine-contained rubber	EPR ethylene-propylene rubber	sets 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
30cc/55cc	SH52R-B	SH52RV-B	SH52RE-B	10



Lab Kit SH100-SK



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

Lab Kit SH100-SK is the assorted dispensing components specifically aimed for an entry-level user who is beginning to use a dispenser or those who would like to find the component most suited to their application.

It includes *Nozzle Kit in which each nozzle with the size ranging from 14G for general purpose to 30G for small amount dispensing is widely assorted.

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...one for each

GP needle tips

A wide variety of needle lengths and orifice sizes can be selected for general application. Burr-free, polished tip provides consistent fluid flow.

General purpose



gauge	ID size (mm)	OD size (mm)	needle length				hub color	sets per box
			6.4mm (0.25")	12.7mm (0.5")	25.4mm (1")	38.1mm (1.5")		
14	1.55 (.061")	1.83 (.072")	SH14-0.25-B	SH14-B	SH14-1-B	SH14-1.5-B	olive	50
15	1.37 (.054")	1.65 (.065")	SH15-0.25-B	SH15-B	SH15-1-B	SH15-1.5-B	amber	50
18	0.91 (.036")	1.27 (.050")	SH18-0.25-B	SH18-B	SH18-1-B	SH18-1.5-B	green	50
20	0.61 (.024")	0.91 (.036")	SH20-0.25-B	SH20-B	SH20-1-B	SH20-1.5-B	pink	50
21	0.51 (.020")	0.81 (.032")	SH21-0.25-B	SH21-B	SH21-1-B	SH21-1.5-B	purple	50
22	0.41 (.016")	0.71 (.028")	SH22-0.25-B	SH22-B	SH22-1-B	SH22-1.5-B	blue	50
23	0.33 (.013")	0.64 (.025")	SH23-0.25-B	SH23-B	SH23-1-B	SH23-1.5-B	orange	50
25	0.25 (.010")	0.51 (.020")	SH25-0.25-B	SH25-B	SH25-1-B	SH25-1.5-B	red	50
27	0.21 (.008")	0.41 (.016")	SH27-0.25-B	SH27-B	—	—	clear	50
30	0.16 (.006")	0.31 (.012")	SH30-0.25-B	SH30-B	—	—	lavender	50
32	0.11 (.004")	0.23 (.009")	SH32-0.25-B	—	—	—	yellow	25

hub : polypropylene
shaft : 304 stainless steel

TT taper tips

TT taper tip provides smooth fluid flow avoiding air entrapment. GEL cyanoacrylate adhesive can also be applied.

General purpose



gauge	ID size (mm)	Material		color	sets per box
		standard	opaque rigid		
14	1.55 (.061")	SH14TT-B	SH14RTT-B	olive	50
16	1.19 (.047")	SH16TT-B	SH16RTT-B	gray	50
18	0.84 (.033")	SH18TT-B	SH18RTT-B	green	50
20	0.61 (.024")	SH20TT-B	SH20RTT-B	pink	50
22	0.41 (.016")	SH22TT-B	SH22RTT-B	blue	50
25	0.25 (.010")	SH25TT-B	SH25RTT-B	red	50

standard : polyethylene
opaque rigid : polypropylene

Angle tips

Angle shaft allows you to reach underneath or inside the work. Available with 45° and 90° bends and 10 different tip diameters ranging from 30-14 gauge.

General purpose



gauge	ID size (mm)	OD size (mm)	needle length		hub color	sets per box
			12.7mm/45° (0.5")	12.7mm/90° (0.5")		
14	1.55 (.061")	1.83 (.072")	SH14-B-45	SH14-B-90	olive	50
15	1.37 (.054")	1.65 (.065")	SH15-B-45	SH15-B-90	amber	50
18	0.91 (.036")	1.27 (.050")	SH18-B-45	SH18-B-90	green	50
20	0.61 (.024")	0.91 (.036")	SH20-B-45	SH20-B-90	pink	50
21	0.51 (.020")	0.81 (.032")	SH21-B-45	SH21-B-90	purple	50
22	0.41 (.016")	0.71 (.028")	SH22-B-45	SH22-B-90	blue	50
23	0.33 (.013")	0.64 (.025")	SH23-B-45	SH23-B-90	orange	50
25	0.25 (.010")	0.51 (.020")	SH25-B-45	SH25-B-90	red	50
27	0.21 (.008")	0.41 (.016")	SH27-B-45	SH27-B-90	clear	50
30	0.16 (.006")	0.31 (.012")	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)	OD size (mm)	needle length		hub color	sets per box
			12.7mm (0.5")	38.1mm (1.5")		
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

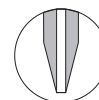
Precision, wedge-shaped tip minimizes the wetted area as small as possible and smaller sizes are useful when making microdots of low-viscosity fluids.

Small area



gauge	tip ID size (mm)	OD size (mm)	needle length				hub color	sets per box
			6.4mm (0.25")	7.0mm (0.28")	9.5mm (0.37")	12.7mm (0.5")		
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



Tip image

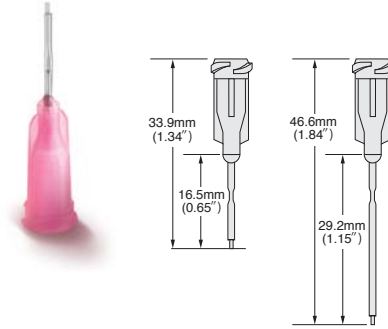
TLC Teflon-lined tips

Teflon line resists clogging of cyanocrylates.

Specialty

gauge	Tip teflon OD size (mm)	Tip teflon ID size (mm)	needle OD size (mm)	needle length		hub color	sets per box
				16.4mm	29.1mm		
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 line: Teflon (nonstick)



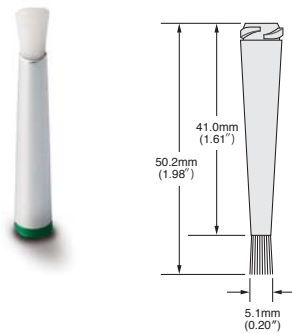
Brush tips

Nylon bristles will not damage the work surfaces and are suited for spreading glues and greases. Soft or stiff bristles are available.

Specialty

Style	standard	high flow
soft	SH40A	SH40HF
stiff	SH41A	SH41HF

bristle: nylon



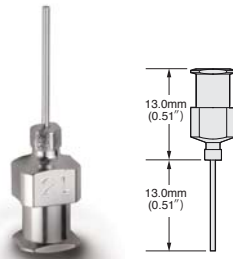
Metal needle tips

13mm tip long as a standard and other length can be customized.

Metal

part number	ID size(mm)	OD size(mm)	sets per box
SSN-20	0.63 (.025")	0.90 (.035")	12
SSN-21	0.53 (.021")	0.81 (.032")	12
SSN-22	0.47 (.019")	0.71 (.028")	12
SSN-23	0.37 (.015")	0.63 (.025")	12
SSN-24	0.33 (.013")	0.55 (.022")	12
SSN-25	0.32 (.013")	0.51 (.020")	12
SSN-26	0.25 (.010")	0.45 (.018")	12
SSN-27	0.20 (.008")	0.41 (.016")	12
SSN-28	0.15 (.006")	0.38 (.015")	12

shaft neck: Ni plate,
shaft: 304 stainless steel



Metal nozzles (one per unit)

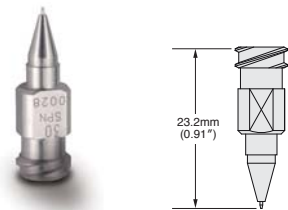
High precision nozzle shaped as one piece provides smooth fluid flow.

Metal

Specialty

part number	ID size(mm)	OD size(mm)
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 orifice needs to be 0.10mm.



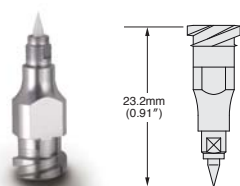
Smooth inner surface prevents clogging and retains fluidity.

Super-Fine ceramic nozzles (one per unit)

Double-thread-screw type nozzle ensures positive attachment to a syringe retaining excellent air tightness. Each size of nozzles by 5µm larger than 0.005mmID can be available.

shaft neck: 303 stainless steel
spacer (between shaft neck and shaft): 303 stainless steel
shaft: ceramic (zirconia)
shaft neck: double-thread screw

Metal



Multiple nozzles

Suited for the application of medium to high viscosity fluids. Different numbers of nozzle and length are available. Multiple chamfered nozzles with taper shaped tips are also available.

Specialty

