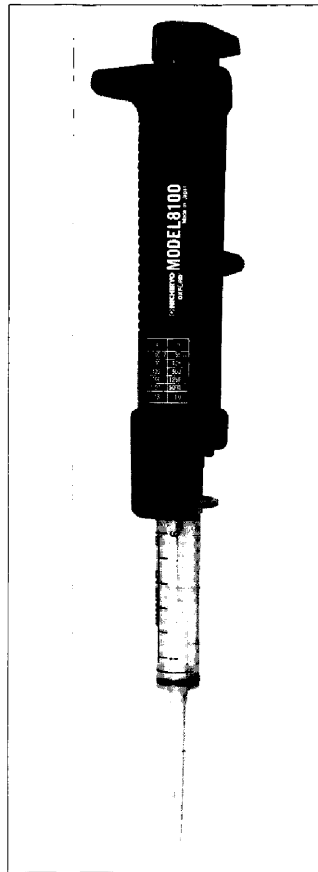


NICHIRYO

MODEL 8100

REPETITIVE SYRINGE DISPENSER



FEATURES

- 21 different volumes of liquid can be dispensed.
- Fast change syringes.
- Light and slender design permits easy handling without fatigue.
- Excellent accuracy and reproducibility.
- Autoclavable syringe. (60.0 ml syringe is not autoclavable.)

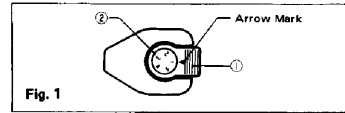


Fig. 1

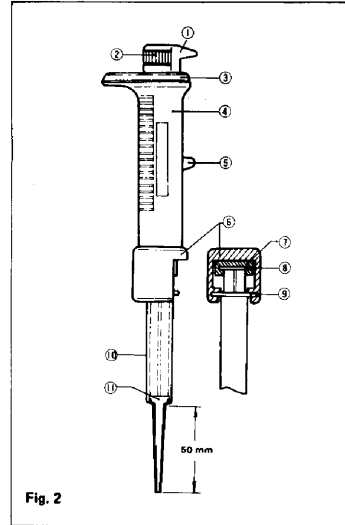
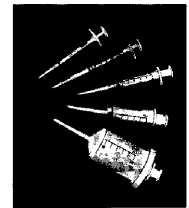


Fig. 2

PARTS AND MATERIALS

1. Thumb Knob (Nylon)
2. Volume Adjustment Dial (Nylon)
3. Handle Cap (ABS)
4. Handle (ABS)
5. Piston Lever (Aluminium)
6. Syringe Holder (Polypropylene)
7. Piston Holder (Polypropylene)
8. Piston Flange (Polypropylene)
9. Syringe Flange (Polypropylene)
10. Syringe (Polypropylene)
11. Piston (Polypropylene & Rubber)



OPERATION

1. Push the piston lever to its lowest position.
2. Select the appropriate syringe. Move the piston of the syringe up and down several times to ensure smooth operation in the dispenser.
3. Push the syringe flange and the piston flange firmly into the syringe holder and the piston holder respectively. (Fig. 2)
4. Select the volume to be dispensed by turning the volume adjustment dial to the appropriate number. (Fig. 1)
5. Place the nozzle of the syringe into the liquid to be dispensed.
6. Pull the piston lever up so that the syringe is filled with liquid. It is recommended to minimize the volume of air in the syringe to obtain better accuracy and reproducibility. (Fig. 2)
7. Wipe the nozzle of the syringe or tip with a tissue.
8. If the syringe has been fully filled, the thumb knob should be depressed once, and the liquid expelled before using the dispenser. The dispenser will then deliver the number of dispenses in accordance with the table attached to the side of the handle.
9. If the syringe is only partially filled, the dispenser can be used by pressing the thumb knob until it reaches the black line at the end of the syringe. To ensure that the dispenser maintains its accuracy, do not dispense liquid after the piston has passed the black line.
10. Place the nozzle or tip of the syringe so that it is touching the inside wall of the receptacle and depress the thumb knob as far as it will go. The desired volume of liquid will then be delivered into the receptacle.
11. After finishing dispensing, the liquid remaining in the syringe can be ejected by pushing the piston lever downwards.

ATTACHMENT OF 60.0 ML SYRINGE

1. To mount the adaptor on the syringe, tilt the adaptor so that square cut on the center hole of the adaptor faces upward, and insert the piston flange through the hole, keeping the adaptor tilted. Mount adaptor on the syringe by turning the adaptor clockwise until it will turn no further.
2. Attach the piston flange to the piston holder and the flange on the adaptor to the syringe holder by pushing them against the holders, keeping the flat side of the piston flange faced against the holder.

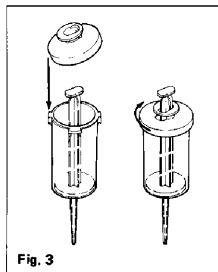


Fig. 3

SPECIFICATION

Manufacturer's Catalog No.	Distributor's Product No.	Dispensing Volume	Accuracy	Reproducibility
SG-S		10 ~ 50 μ l	$\pm 1.5\%$	1.5% ~ 1.0%
SG-M		25 ~ 125 μ l	$\pm 1.2\%$	1.0% ~ 0.8%
SG-L		100 ~ 500 μ l	$\pm 0.8\%$	0.8% ~ 0.4%
SG-Y		250 ~ 1250 μ l	$\pm 0.6\%$	0.6% ~ 0.3%
SG-Z		1000 ~ 5000 μ l	$\pm 1.0\%$	1.0% ~ 0.5%

The above specifications were acquired using water at a temperature of 20°C. The SG-S () and SG-M () tests were done using syringes having pipette tips on the nozzles.

DISPENSING VOLUMES

Volume Adjustment Dial Number	Size of Syringe					Maximum number of dispense
	0.6ml (SG-S)	1.5ml (SG-M)	6.0ml (SG-L)	15.0ml (SG-Y)	60.0ml (SG-Z)	
1	10 μ l	25 μ l	100 μ l	250 μ l	1000 μ l	58
2	20 μ l	50 μ l	200 μ l	500 μ l	2000 μ l	28
3	30 μ l	75 μ l	300 μ l	750 μ l	3000 μ l	18
4	40 μ l	100 μ l	400 μ l	1000 μ l	4000 μ l	13
5	50 μ l	125 μ l	500 μ l	1250 μ l	5000 μ l	10

ORDERING INFORMATION

Manufacturer's Catalog No.	Distributor's Product No.	Description	Q'ty
8100		One instrument with one each of 6.0ml, 1.5ml and 0.6ml syringe	1
SG-S		0.6ml syringe with a tip (autoclavable)	100
SG-M		1.5ml syringe with a tip (autoclavable)	100
SG-L		6.0ml syringe (autoclavable)	100
SG-Y		15.0ml syringe (autoclavable)	50
SG-Z		60.0ml syringe with one adaptor	50

For repair service or information you may contact your local distributor.

MANUFACTURER: **NICHIRYO CO., LTD.**

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