

laboratory syringes

From the basic unit to the corrosion resistant model, the laboratory dedicated syringe line offers precision instruments you can trust.

Intended for safe and reliable liquid distribution, the selection of pistol grip and two-ring instruments comes in a wide volume range.

All-glass syringes are a high-value, low-cost alternative to plastic syringes, complementing the self-refilling models in many applications.

Automatic syringe features and benefits:

- Optimal hand balance and ergonomics
- Fast and reliable volume setting
- Excellent reproducibility
- Plunger tightness without O-ring
- High chemical resistance
- Easy disassembling and maintenance
- Fully autoclavable

The Dosys™ *syringe* series **150 160 170**





Simple, natural movements Both pistol grip and two-ring handle fit any hand in a most comfortable way. Activation performed with limited effort even in long dispensing series.



Volume selection reliable reproducibility

Volume is set within seconds. It will not vary while activating the syringe, thanks to the safety-locking nut on the micrometric screw. Dose by dose reproducibility (CV) is excellent, as witnessed by performance figures.



Plunger tightness without O-ring



Smooth plunger travel and tightness achieved through highprecision stainless steel plunger and grounded glass barrel. No O-ring to mess with or replace. Each laboratory syringe is supplied with a PVC protection sleeve (not autoclavable) to prevent glass barrel breakage.



Few-part assembly – means low maintenance The automatic syringes are made of

6 main parts, easy to disassemble. Fast access to all elements allows rapid and efficient cleaning. Spares are available at reasonable cost.

Automatic syringe specifications

The Socorex self-refilling syringes are efficient in many repeat dispensing activities of reagents, solutions or suspensions.

Refer to charts below to select the appropriate models for your needs.

Dosys™ *basi*

162/172

• Fill by fill (automati through needle or c

- Plunger without O-rin
- Interchangeable glass
- Luer Lock fitting *



Instrument selection

Volume range mL	Division mL	Two-ring model 162 Cat. No.
0.025 - 0.3	0.025	
0.1 - 0.5	0.1	
0.1 - 1	0.05	162.0501
0.3 - 2	0.1	162.0502
0.5 - 5	0.5	162.0505
1 - 10	1	
Volume range mL	Division mL	Pistol model 172 Cat. No.
range mL 0.025 - 0.3	mL 0.025	
range mL 0.025 - 0.3 0.1 - 0.5	mL 0.025 0.1	Cat. No.
range mL 0.025 - 0.3 0.1 - 0.5 0.1 - 1	mL 0.025 0.1 0.05	Cat. No. 172.0501
range mL 0.025 - 0.3 0.1 - 0.5 0.1 - 1 0.3 - 2	mL 0.025 0.1 0.05 0.1	Cat. No. 172.0501 172.0502
range mL 0.025 - 0.3 0.1 - 0.5 0.1 - 1 0.3 - 2 0.5 - 5	mL 0.025 0.1 0.05	Cat. No. 172.0501 172.0502 172.0505
range mL 0.025 - 0.3 0.1 - 0.5 0.1 - 1 0.3 - 2	mL 0.025 0.1 0.05 0.1	Cat. No. 172.0501 172.0502
	range mL 0.025 - 0.3 0.1 - 0.5 0.1 - 1 0.3 - 2 0.5 - 5	range mL mL 0.025 - 0.3 0.025 0.1 - 0.5 0.1 0.1 - 1 0.05 0.3 - 2 0.1 0.5 - 5 0.5

Accessories

Description	Size	See page	Comment	Included	• Optiona
Protection sleeves	6 sizes	6			
Feed tubing	1 meter	6			
Sinker			Needle on 20 mL		
Feed cannula	Up to 10 mL, Ø 3 x 190 mm 20 mL, Ø 7 x 190 mm,	6			
Vent cannula	Up to 5 mL, Ø 1.2 x 40 mm 10 mL, Ø 3 x 40 mm 20 mL, Ø 7 x 40 mm	6			
Set of spares for valves		6			
Dosing cannulas, Luer Lock	1 and 2 mL, Ø 1.2 x 50 mm 5 and 10 mL, Ø 2.2 x 100 mm	5			
Manifolds	4 and 8 channel	4			
Other needles and cannulas		5			•
Tubing connector, Luer Lock			Cat. No. 187.736		
Vial holder conversion set		3	Except 20 mL		
Enhanced tightness set		4	5 mL only		
Aspiration valve		4			•
Reagent reservoirs	3 sizes	3	Except 20 mL		
Tip, polypropylene	37 mm	5			
	Ø 4 x 190 mm	5			
Nylon brushes	3 sizes	5			•
Syringe stand		3			

*Threaded and other nozzles available

T			and the second division of the second divisio
			rosion
С	Dosys™ <i>classic</i>	Dosys™ <i>premium</i>	istant
2	163/173	164/174	///// *****
c) annula	 Self-refilling, automatic Integrated valve system 	 Self-refilling, automatic Detachable valve system Enhanced corrosion 	
g barrel	Plunger without O-ringInterchangeable glass barrel	resistance	
	• Luer Lock fitting *	 Plunger without O-ring Interchangeable glass barrel Luer Lock fitting * 	
H			Performance
	Two-ring model 163 Cat. No.	Two-ring model 164 Cat. No.	Precision CV % Min. vol. Max. vol.
	163.05003 163.05005		< 1.8 % ¹⁾ < 0.5 % < 1.2 % < 0.4 %
	163.0501 163.0502	164.0501 164.0502	< 0.7 % < 0.4 % < 0.6 % < 0.4 %
		164.0505 164.0510	< 0.5 % < 0.2 % < 0.5 % < 0.2 %
			See note on accuracy on page 6 1) mesured at 0,075mL
	Pistol model 173 Cat. No.	Pistol model 174 Cat. No.	Precision CV % Min. vol. Max. vol.
	173.05003		< 1.8 % ¹⁾ < 0.5 %
	173.05005 173.0501	174.0501	< 1.2 % < 0.4 % < 0.7 % < 0.4 %
	173.0501	174.0501	< 0.6 % < 0.4 %
	173.0505	174.0505	< 0.5 % < 0.2 %
	173.0510 173.0520	174.0510	< 0.5 % < 0.2 % < 0.5 % < 0.4 %
	175.0520		See note on accuracy on page 6 1) mesured at 0,075mL
ıl	■ Included ● Optional	■ Included ● Optional	
	•	•	
	•	•	
	•	•	
	•	•	
	•	•	13
	•	•	1.0
		•	113
	•	•	3
	•	•	
	•	•	

on request



Alternative feed sources

Optional vial holder conversion set and reagent reservoirs for additional liquid feeding possibilities.

Description	Packaging	Cat. No.
Slant vial holder conversion set for 163 and 173 models (except 20 mL) without vial	1 / pk	1.187.1C
PP bottle, 60 mL	1 / pk	1.187.060*
PP bottle, 125 mL	1 / pk	1.187.150*
PP bottle, 250 mL	1 / pk	1.187.250*

* Use with Rotlauf inlet valve Cat. No. 187.613 only (to be ordered separately).

Liquid path materials

Parts in contact with the liquid are made of carefully selected, chemically resistant materials:

Parts	Basic / classic models	<i>Premium</i> models
Feed tubing	Silicone	
Barrel	Borrosilicate glass	
Washer, barrel	FPM	
Plunger	St. steel DIN 304	St. steel DIN 316L
Valve system	Ni-Cr Brass	St. steel DIN 316L
Washer, valve	PTFE	
Spring and balls, valve	Stainless steel, DIN 304	
Sinker, feed cannula	Ni-Cr	Brass

Syringe stand

Stand holds syringe in ready-to-fetch position. Easy-to-clean material.

Description	Packaging	Cat. No.
Stand for one automatic syringe	1 / pk	320.170

Unlimited applications



Dispensing / distribution

Spring-loaded plunger and three-way valve system allow for trouble-free distribution of a large variety of liquids. Feed tubing standard supplied. See accessories for bottle feeding.



Sterile work

Syringes and accessories are autoclavable fully assembled (121°C). Particularly adapted for sterile distribution of hot agar, or precise dosing of culture media and supplements in tissue culture flasks.



Filtration at your nozzle tip

A sterile filter disk set on the Luer lock outlet valve turns the instrument into a filtration syringe. Optional enhanced tightness set improves efficiency of long filtration series or when using small pore sizes.

Dose by dose distribution

Sampling with 162 and 172 models (or 164 / 174 models after removing the detachable valve assembly). Both springassisted aspiration and distribution occur through the cannula.

Aspiration

The *reverse modus* valve set is meant for precise and safe liquid aspiration (ex. waste collection in separate container). Vented waste collector cap and enhanced tightness set are recommended.

Animal injection

For safe and stress-free injections of laboratory animals. Select suitable needles and drenchers listed in the accessory section.



Multiple dispensing manifold Tightly fitting any Luer and Luer Lock syringe nozzles, the stainless steel manifolds (with PTFE stoppers) allow convenient media distribution in 24- and 96 well plates. Fully autoclavable.

Description	Packaging	Cat. No.
4 channel, Luer Lock	1 / pk	1.170.054
8 channel, Luer Lock	1 / pk	1.170.058



• Enhanced tightness set

The special clear glass barrel / O-ring fitted plunger enhance tightness when demanded by application. (ex. filtration, aspiration, etc.)

Description	Packaging	Cat. No.
Enhanced tightness set, for 5 mL automatic syringes	1 / pk	1.170.205
Spare glass barrel 5 mL for tightness set	6 / pk	0187.05T



Accessories for aspiration

Description	Packaging	Cat. No.
<i>Reverse modus</i> aspiration valve unit for 162 / 172 /164 / 174 models	1 / pk	1.170.952
Screw cap Ø 45 mm, with tubing connection and filtered air outlet	1 / pk	1.170.945



All-glass syringes

and tightness.

The reusable borosilicate glass syringes are superior chemical and heat shock resistant. Precision-machined plunger and barrel provide for excellent fitting

Volume

range mL

0.1 - 1

0.5 - 2

0.2 - 5

1 - 10

1 - 20

- 50



Packaging

3 / pk

3 / pk

3 / pk

3 / pk

1 / pk

2 / pk

Dosys™ all glass

155

• Permanent, high visibility

graduations for accurate

distribution up to 50 mL

Luer Lock metal

nozzle Cat. No.

155.0501

155.0502

155.0505

155.0510

155.0520

155.0550

• Autoclavable at 121° C.

Luer nozzle

Cat. No.

155.0301

155.0305

155.0310

155.0320



Choice of nozzles All glass syringes have Luer or Luer Lock fitting at choice.



Tips and straws

Polypropylene tips and straws offer alternative syringe extensions where needles and cannulas are unsuitable. Simply cut straw to desired length.

Cylinder and tube brushes Heavy-duty nylon brushes with tufted

end provide for efficient glass barrel and tube cleaning.



Drenchers allow safe animal mouth feeding. Stainless steel, autoclavable.



Needles and cannulas Superior quality, stainless steel, autoclavable.



Natural PP tips and straws

Description	Packaging	Cat. No.
Short tip, 35 mm, autoclavable	100 / bag	313.170
Straw, Ø 4 mm, L 190 mm sterile	20 x 25 / pk	313.1100

Division

mL 0.05

0.1

0.2

0.2

1

Brush with plastic handle

Description	Packaging	Cat. No.
For 0.3, 0.5, 1 mL barrels	6 / pk	1.170.301
For 1, 2, 5 mL barrels	6 / pk	1.170.305
For 5, 10, 20 mL barrels	3 / pk	1.170.320
Set of 2 each nylon brushes assorted	6 / pk	1.170.300

Drenchers, animal mouth cannulas

Drencher, straight (Ø x L)	Packaging	Cat. No.	Drencher, bent (Ø x L)	Packaging	Cat. No.
0.9 x 25 mm	3 / pk	376.09255	0.9 x 25 mm	3 / pk	376.0925B
1.2 x 51 mm	3 / pk	376.12515	1.2 x 51 mm	3 / pk	376.1251B
1.6 x 102 mm	3 / pk	376.161025	1.6 x 102 mm	2 / pk	376.16102B
3.0 x 203 mm	2 / pk	376.302035	3.0 x 203 mm	2 / pk	376.3020B

Needles and cannulas

Blunt end lab cannula (Ø x	L) Packag	ing	Cat. No.	Beve	lled needle	(Ø x L)	Packaging	Cat. No.
0.8 x 40 mm 1.2 x 50 mm 2.2 x 100 mm	12 / p 1 / p 1 / p		370.0840 370.1250 370.22100	1.6 >	< 10 mm < 20 mm < 30 mm		1 / pk 1 / pk 1 / pk	371.1210UN 371.1620UN 371.2030UN
Bevelled needle (Ø x L) 12/pack	Cat. No.		velled needle x L) 12/pack		Cat. No.	Bevelled (Ø x L)	l needle I2/pack	Cat. No.
0.8 x 20 mm 2 0.8 x 30 mm 2	371.0810 371.0820 371.0830 371.0840	1.2 1.2	2 x 15 mm 2 x 20 mm 2 x 35 mm		371.1215 371.1220 371.1235 371.1250	1.8 x 10 1.8 x 20 1.8 x 30 2.0 x 30	mm mm	371.1810 371.1820 371.1830 371.2030
1.0 x 10 mm 1.0 x 20 mm	371.1010 371.1010 371.1020 371.1030	1.6 1.6	2 x 50 mm 5 x 20 mm 5 x 25 mm 5 x 30 mm		371.1250 371.1620 371.1625 371.1630	2.0 x 30 2.0 x 40 2.0 x 50 2.0 x 10	mm mm	371.2030 371.2040 371.2050 371.20100
1.0 x 40 mm	371.1040	1.6	5 x 100 mm		371.16100	Additiona	ıl sizes availa	ble



laboratory syringes

Spares for self-refilling syringes



Glass barrel, grounded, interchangeable		
Spare glass barrel, 0.3 mL	6 /pk	0187.003
Spare glass barrel, 0.5 mL	6 /pk	0187.005
Spare glass barrel, 1 mL	6 /pk	0187.01
Spare glass barrel, 2 mL	6 /pk	0187.02
Spare glass barrel, 5 mL	6 /pk	0187.05
Spare glass barrel, 10 mL	6 /pk	0187.10
Spare glass barrel, 20 mL	3 /pk	0187.20

Packaging

Cat. No.



Description

Fit 0.3, 0.5 mL barrel	6 /pk	1.170.4005
Fit 1 mL barrel	6 /pk	1.170.401
Fit 2 mL barrel	6 /pk	1.170.402
Fit 5 mL barrel	6 /pk	1.170.405
Fit 10 mL barrel	6 /pk	1.170.410
Fit 20 mL barrel	3 /pk	1.170.420

Note on published performance data

Tests performed with bi-dest water, using a stainless steel cannula (Ø: 1.2 mm, L: 50 mm) at constant working speed. The accuracy may vary according to the plunger adjustment and working speed.

Performance data using manifolds available on request.



Spare bag includes springs, balls, washers for valve and barrel washer

Set for valve, 0.3 mL	1 bag	1.187.05003
Set for valve, 0.5 mL	1 bag	1.187.72005
Set for valve, 1 mL	1 bag	1.187.7201
Set for valve, 2 mL	1 bag	1.187.7202
Set for valve, 5 mL	1 bag	1.187.7205
Set for valve, 10 mL	1 bag	1.187.7210
Set for valve, 20 mL	1 bag	1.187.7220



Spare feed tubing

Silicone, for syringe 0.3 - 10 mL	1 m	187.705
Silicone, for syringe 0.3 - 10 mL	Uncut, by the meter	187.710
Vinyl, for syringe 0.3 - 10 mL	1 m	187.709
Silicone, for syringe 20 mL	1 m	187.707



Spare cannulas

Short vent cannulas:		
For 0.3 to 5mL models, plastic / ss	1 /pk	187.933
For 10 mL model, chrome plated	1 /pk	187.591
For 20 mL model, chrome plated	1 /pk	187.593
Long feed cannulas, chrome plated:		
For 0.3 to10 mL models	1 /pk	187.592
For 20 mL model	1 /pk	187.594

Your local distributor







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