



Your quality partner worldwide

# Precision liquid volumetry

- **Micro and macropipettes**
- **Pipette tips and accessories**
- **Repeater pipettes**
- **Dispensers**
- **Laboratory syringes**



# A world of expertise in precision

Dear Partners,

Today, more than ever, quality, reliability, and accuracy make the difference in the demanding world of precision liquid handling. These fundamental and timeless values have been at the heart of Socorex for more than 60 years.

Our company offers high-performance instruments and accessories that will undoubtedly match your ergonomic, functionality, and durability expectations.

By choosing Socorex, you are sure to get top-quality, innovative Swiss-made products, manufactured with special care and attention to meet all your specific needs.

You can also count on an extensive international network of loyal partners who are close to users, and who will offer you excellent first-class advice and technical support.

I look forward to working with and for you in this new era, and I wish you great success in your endeavors.

*Sincerely*  
*Julien Ruchet, CEO*



## Brief history

Socorex Isba SA, often referred to as just Socorex, started its activity with the manufacture of glass and metal syringes for medical applications. Over the years, single use plastic syringes became more popular and Socorex undertook a reconversion towards more promising markets. Mastering precision volumetry, the company concentrated its developments in two distinct laboratory and animal health divisions, reflecting a long run strategic reconversion.

Sixty years later, the high technical know-how, professional team and healthy growth management enable Socorex to permanently adapt and diversify. The company is still based in the same location, but in an enlarged, modern production site supporting the company's capacity to handle many more success stories in the future.

## Products & Services

Today's manufacturing program includes a variety of high precision instruments used for reliably measuring, dosing, transferring, dispensing, and injecting liquids in a large number of applications. Manual and electronic micropipettes, single and multichannel pipettors, repeater pipettes, dispensers, manual and electronic pipette controllers, and re-usable syringes, together with their accessories, constitute the heart of the portfolio. Each precision instrument bears its own serial number and passes a strict performance control attested by an individual QC certificate.

The Socorex Service Center offers a global repair and calibration service. The choice ranges from basic maintenance to accredited calibrations of all micropipettes and dispensers according to ISO 17025 - whatever their brand.

Additional information on our website  
[www.socorex.com](http://www.socorex.com)



# liquid handling

## **Our customers**

We are proud to include virtually all private, industrial, academic and government laboratories as our customers.

Those are involved in routine, research, and educational activities in fields as diverse as life sciences - such as biotechnology and molecular biology - medicine, chemistry, pharmacology, environment, agriculture, etc.

Scientists are served efficiently by the dedicated network of Socorex distributors. Selected amongst the best suppliers, they carry an inventory of our products and provide technical support, repair and calibration services.

Find your closest Socorex partners listed on [www.socorex.com](http://www.socorex.com)

## **Quality achievements**

Socorex dedication to precision and quality has been an all-time tradition. Our commitment to manufacturing the most reliable instruments and to offering the best services was formalised with the completion of the ISO 9001 and ISO 13485 Quality Management System certifications. Instruments are designed to operate under national and international standards such as ISO 8655, GLP and GMP.

Warranty coverage is three years on all manual pipettors, two years on electronic pipettes, dispensers and repeaters.







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**Electronic micropipettes**  
*Acura<sup>®</sup> electro*



**8**  
**Manual micropipettes**  
*Acura<sup>®</sup> manual*  
*Acura<sup>®</sup> manual XS*



**17**  
**Dilution pipette**  
*Acura<sup>®</sup> dilute*



**18**  
**Pipette stands**  
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*In-line<sup>™</sup>*



**20**  
**Premium pipette tips**  
*Qualitix<sup>®</sup>*



**26**  
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**Sterilization pouches**  
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**Positive displacement micropipettes**  
*Acura<sup>®</sup> capillar*



**30**  
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**Pipette controllers**  
*Profiller<sup>™</sup>*  
*Profillette<sup>™</sup>*



**34**  
**Self-refilling microdispenser pipette**  
*Acura<sup>®</sup> self-refill*



**35**  
**Low-profile dispenser**  
*Acurex<sup>™</sup> compact*



**36**  
**Bottle-top dispensers**  
*Calibrex<sup>™</sup>*



**45**  
**Laboratory syringes**  
*Dosys<sup>™</sup>*



**51**  
**All-glass syringes**  
*Dosys<sup>™</sup> all-glass*



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**Socorex Service Center**

# Electronic micropipettes

## The Acura® *electro* models

**Micropipette line making electronic pipetting simpler and safer than ever. The microprocessor-controlled instrument includes intuitive software avoiding any complicated programming steps. No particular skills are required to get quick access to six working modes and many volumes to select from.**

**Two-year warranty.**

- Optimal ergonomics, light weight
- Easy, intuitive self-teaching programme
- Large display, reversible for right or left reading
- Swift-interchange battery pack
- Fast charge, long working autonomy
- Justip™ adjustable tip ejector fitting most tips
- Pipetting cycle counter
- 27 interchangeable volumetric modules all fitting same control unit

## Great built-in

Surf through mode selection by pressing a single button.



### Natural ergonomics

The Acura® *electro* offers shape, balance and working ergonomics resembling those of a manual instrument. But comfort is so greatly improved that pipetting and result consistency are just outstanding.

### Unique “right or left” display reading

Display converts instantly to right or left side reading. All information clearly presented and visible at a glance during programming, pipetting and calibration steps.



### Variable working speed

Located on the front side, speed selector allows swift change even during the pipetting process.

In addition, slow speed access at any time by gentle touch of start button.

### Pipetting cycle counter

A simple double click gives access to the number of pipetting cycles performed since last zeroing.



### Tip ejection - easier than ever

Maximal efficiency obtained with a large surface, ergonomically located ejector button. The shaft height adjustment system called Justip™ (4 mm span) - controlled by efficient click-stops - allows a wide selection of tips to tightly fit the nozzle. The multichannel bowed shape ejector head permits effortless, sequential tip ejection.

## working flexibility

### Forward mode

Aspiration and pipetting of set volume.  
Suitable for all applications.

### Reverse mode

Aspiration in excess, followed by dosing of set volume. Enhances reproducibility below 20 µL. Especially recommended for viscous and foaming liquids.

### Stepper mode

Tip filling and step-by-step distribution.  
Best suited to aliquot samples.

### Dilution mode

Aspiration of 2 or 3 different volumes for restitution in one shot. An easy way to dilute samples.

### Tactile mode

“Start and stop” liquid measurement and dispensing, used amongst others for titration and gel loading by simple touch of activation button.

### Mixing

“Up and down” liquid flow in the tip / vial.



### Interchangeable volumetric modules

One control unit fits a choice of 27 volumetric assemblies available separately. This greatly extends working possibilities and makes electronic pipetting affordable to all budgets. Disassembling and re-assembling without any tool contributes towards maximal flexibility. Calibration specificities of extra modules - as set by factory QC or by pipette owner - are retained in instrument memory.



### Pipette charging stand

Stand allows charging and storing up to three electronic pipettes or battery packs simultaneously. Each position is fitted with a red/green charging LED. One stand supplied with every initial package.

### Battery charging rack

Space saving stand holds up to three battery packs simultaneously. The ideal charging and storage accessory for spare batteries, available at any time.



### Calibration

Performance check and new calibration possible over two or three independent volumes (Vmin, Vmid and Vmax). New settings entered directly from the keyboard. Error message warns of any inaccurate plunger movement.



### Long working autonomy

NiMH battery pack exchangeable instantly. Fast battery charging (< 1.5 hours) and extended working autonomy (> 3000 consecutive pipetting cycles). Battery charge level clearly visible on display. Automatic energy saving stand-by when unused.



## Electronic micro, macro and multichannel pipettes

### Acura® *electro* 926XS micropipettes

- Reduced shaft length and conical end improve driveability
- Easy access to microtubes and microplates
- Optional longer volumetric modules
- Simple conversion by user at any time
- Unsurpassed metrological performance and stability

### Acura® *electro* 936 macropipettes

- Interchangeable nozzle protection filter
- Adapters for Pasteur pipette
- Outstanding accuracy and precision

### Acura® *electro* 956 multichannel

- Large selection of 8- and 12-channel models
- Light weight and perfect hand fitting
- Sequential tip ejection
- Also fit any single channel volumetric module



**926XS**  
micro

0.1 - 2 µL  
0.5 - 10 µL  
1 - 20 µL  
2.5 - 50 µL  
5 - 100 µL  
10 - 200 µL  
50 - 1000 µL

**936**  
macro

0.1 - 2 mL  
0.25 - 5 mL  
0.5 - 10 mL

**956**  
multi

0.5 - 10 µL  
2.5 - 50 µL  
10 - 200 µL  
20 - 350 µL



#### Initial package

Recommended when purchasing an Acura® *electro* for the first time, each initial package contains one electronic pipette, QC certificate and operating instructions, charging stand, power supply, additional battery pack, Qualitix® pipette tips samples. Thereafter, additional pipettes can be purchased alone and charged on existing stand.



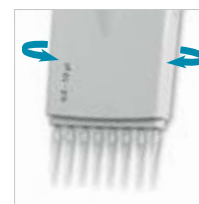
#### Nozzle protection filter

Macro models accommodate a filter protecting instrument against liquid overflow and contamination. Located in the nozzle, it can be removed and changed easily.



#### Pasteur pipette adapter

Optional accessory fits 2 mL glass Pasteur pipettes instead of polypropylene macrotips.



#### Optimal working position

360° rotation of multichannel volumetric modules allows selection of the best working position.



#### Time efficient maintenance

Pipette construction limits maintenance to a minimum - no tool required to remove volumetric module. The pipetting cycle counter facilitates maintenance monitoring.



Whenever sterilization is needed, volumetric modules can be autoclaved at 121°C / 250°F.



# Electronic micropipettes and accessories

## Performance and ordering information - Instruments

Initial package includes pipette, charging stand and accessories. Pipettes alone only supplied with individual QC certificate, Qualitix® pipette tips samples and operating instructions.

Volume	Division	Inaccuracy (E%)			Imprecision (CV%)			Tip style	Cat. No. Initial package*	Cat. No. Pipette alone
		Min. vol.	Mid. vol.	Max. vol.	Min. vol.	Mid. vol.	Max. vol.			
<b>Micropipettes Acura® electro 926XS</b>										
0.1 - 2 µL	0.01 µL	<± 2.5 % <sup>1</sup>	<± 1.2 %	<± 0.9 %	< 2.5 % <sup>2</sup>	< 1.5 %	< 0.8 %	Ultra 10 µL	926.0002E	926.0002
0.5 - 10 µL	0.05 µL	<± 1.2 % <sup>2</sup>	<± 0.8 %	<± 0.6 %	< 1.5 % <sup>2</sup>	< 0.7 %	< 0.35 %	Ultra 10 µL	926.0010E	926.0010
0.5 - 10 µL	0.05 µL	<± 1.2 % <sup>2</sup>	<± 0.8 %	<± 0.6 %	< 1.7 % <sup>2</sup>	< 0.8 %	< 0.4 %	200 µL	926.0010YE	926.0010Y
1 - 20 µL	0.1 µL	<± 1.2 % <sup>2</sup>	<± 0.6 %	<± 0.5 %	< 1.2 % <sup>2</sup>	< 0.4 %	< 0.3 %	200 µL	926.0020E	926.0020
2.5 - 50 µL	0.25 µL	<± 1.0 % <sup>2</sup>	<± 0.6 %	<± 0.5 %	< 0.7 % <sup>2</sup>	< 0.3 %	< 0.25 %	200 µL	926.0050E	926.0050
5 - 100 µL	0.5 µL	<± 1.0 % <sup>2</sup>	<± 0.6 %	<± 0.5 %	< 0.7 % <sup>2</sup>	< 0.3 %	< 0.2 %	200 µL	926.0100E	926.0100
10 - 200 µL	1.0 µL	<± 1.0 % <sup>2</sup>	<± 0.6 %	<± 0.4 %	< 0.6 % <sup>2</sup>	< 0.2 %	< 0.15 %	200 µL	926.0200E	926.0200
50 - 1000 µL	5.0 µL	<± 0.8 % <sup>2</sup>	<± 0.5 %	<± 0.4 %	< 0.4 % <sup>2</sup>	< 0.15 %	< 0.1 %	1000 µL	926.1000E	926.1000
<b>Macropipettes Acura® electro 936</b>										
0.1 - 2 mL	0.01 mL	<± 1.5 % <sup>2</sup>	<± 1.0 %	<± 0.5 %	< 0.6 % <sup>2</sup>	< 0.3 %	< 0.15 %	2 mL	936.02E	936.02
0.25 - 5 mL	0.05 mL	<± 1.2 % <sup>2</sup>	<± 0.8 %	<± 0.5 %	< 0.6 % <sup>2</sup>	< 0.3 %	< 0.15 %	5 mL	936.05E	936.05
0.5 - 10 mL	0.05 mL	<± 1.0 % <sup>2</sup>	<± 0.7 %	<± 0.5 %	< 0.5 % <sup>2</sup>	< 0.2 %	< 0.15 %	10 mL	936.10E	936.10
<b>8-channel pipettes Acura® electro 956</b>										
0.5 - 10 µL	0.05 µL	<± 3.5 % <sup>2</sup>	<± 1.5 %	<± 1.0 %	< 3.0 % <sup>2</sup>	< 0.9 %	< 0.7 %	Ultra 10 µL	956.08.010E	956.08.010
2.5 - 50 µL	0.25 µL	<± 1.0 % <sup>2</sup>	<± 0.9 %	<± 0.8 %	< 1.0 % <sup>2</sup>	< 0.6 %	< 0.4 %	200 µL	956.08.050E	956.08.050
10 - 200 µL	1.0 µL	<± 0.9 % <sup>2</sup>	<± 0.7 %	<± 0.6 %	< 0.6 % <sup>2</sup>	< 0.4 %	< 0.25 %	200 µL	956.08.200E	956.08.200
20 - 350 µL	5.0 µL	<± 1.0 % <sup>2</sup>	<± 0.8 %	<± 0.6 %	< 0.6 % <sup>2</sup>	< 0.4 %	< 0.25 %	350 µL	956.08.350E	956.08.350
<b>12-channel pipettes Acura® electro 956</b>										
0.5 - 10 µL	0.05 µL	<± 3.5 % <sup>2</sup>	<± 1.5 %	<± 1.0 %	< 3.0 % <sup>2</sup>	< 0.9 %	< 0.7 %	Ultra 10 µL	956.12.010E	956.12.010
2.5 - 50 µL	0.25 µL	<± 1.0 % <sup>2</sup>	<± 0.9 %	<± 0.8 %	< 1.0 % <sup>2</sup>	< 0.6 %	< 0.4 %	200 µL	956.12.050E	956.12.050
10 - 200 µL	1.0 µL	<± 0.9 % <sup>2</sup>	<± 0.7 %	<± 0.6 %	< 0.6 % <sup>2</sup>	< 0.4 %	< 0.25 %	200 µL	956.12.200E	956.12.200
20 - 350 µL	5.0 µL	<± 1.0 % <sup>2</sup>	<± 0.8 %	<± 0.6 %	< 0.6 % <sup>2</sup>	< 0.4 %	< 0.25 %	350 µL	956.12.350E	956.12.350

Performance values obtained in forward mode with bidest. water at constant temperature (± 0.5°C) comprised between 20 and 25°C in accordance with ISO 8655. Results can be improved by individual calibration in each mode. Measured at: <sup>1</sup> 0.5 µL, <sup>2</sup> 10% of nominal volume.

\* Replace E by country code if other plug type than Europe style needed: G = UK, U = USA-Japan, A = Australia-NZ

## Ordering information - Volumetric modules and accessories



Volume range	Tip style	Cat. No.
<b>Single channel microvolumes</b>		
<b>Reduced shaft length</b>		
0.1 - 2 µL	Ultra 10 µL	800.0002XS
0.5 - 10 µL	Ultra 10 µL	800.0010XS
0.5 - 10 µL	200 µL	800.0010YXS
1 - 20 µL	200 µL	800.0020XS
2.5 - 50 µL	200 µL	800.0050XS
5 - 100 µL	200 µL	800.0100XS
10 - 200 µL	200 µL	800.0200XS
50 - 1000 µL	1000 µL	800.1000XS
<b>Regular shaft length</b>		
0.1 - 2 µL	Ultra 10 µL	800.0002
0.5 - 10 µL	Ultra 10 µL	800.0010
0.5 - 10 µL	200 µL	800.0010Y
1 - 20 µL	200 µL	800.0020
2.5 - 50 µL	200 µL	800.0050
5 - 100 µL	200 µL	800.0100
10 - 200 µL	200 µL	800.0200
50 - 1000 µL	1000 µL	800.1000

Volume range	Tip style	Cat. No.
<b>Single channel macrovolumes</b>		
0.1 - 2 mL	2 mL	800.2000
0.25 - 5 mL	5 mL	800.5000
0.5 - 10 mL	10 mL	800.10000
<b>8-channel microvolumes</b>		
0.5 - 10 µL	Ultra 10 µL	800.08.010
2.5 - 50 µL	200 µL	800.08.050
10 - 200 µL	200 µL	800.08.200
20 - 350 µL	350 µL	800.08.350
<b>12-channel microvolumes</b>		
0.5 - 10 µL	Ultra 10 µL	800.12.010
2.5 - 50 µL	200 µL	800.12.050
10 - 200 µL	200 µL	800.12.200
20 - 350 µL	350 µL	800.12.350

Description	Packaging	Cat. No.
<b>Charging units, 3 positions</b>		
Stand for pipettes and battery packs	1 / pk	320.903.48
Stand for battery packs only	1 / pk	320.913.48
<b>Spare battery, blue colour</b>		
NiMH, 4.8V	1 / pk	900.920.48
NiMH, 4.8V	2 / pk	900.922.48
<b>Power supply, 100-240V</b>		
Europe style plug	1 / pk	900.901.48E
UK style plug	1 / pk	900.901.48G
USA-Japan style plug	1 / pk	900.901.48U
Australia - NZ style plug	1 / pk	900.901.48A
<b>Nozzle protection filters</b>		
For 2 and 5 mL models	50 / pk	322.05
For 10 mL model	50 / pk	322.10
<b>Adapter-nozzle - Pasteur pipette</b>		
For 2 mL model	1 / pk	1.835.631
For 5 mL model	1 / pk	1.835.633

# Manual micropipettes

## The Acura® manual models

The Acura® manual micropipettes are combining high-tech materials with exceptional, user-friendly ergonomics. A wide choice of models offers much more than superior performance and makes pipetting safe and comfortable.

- Smart and reliable volume adjustment
- Single-handed volume setting
- Precision digital display visible at all time
- Justip™ adjustable tip ejector fitting most tips
- Swift-set user calibration system
- Shock, UV light and autoclaving resistance

See pipette stands page 18

See pipette tips page 20



### Most comfortable pipetting

The Acura® manual fits everybody's hand with or without glove. Ergonomic shape, light weight and soft plunger travel care for better comfort.

### Ejector button

Ergonomically positioned, the large surface, soft-padded ejector provides for low-pressure activation.

### Smart and reliable volume adjustment

State-of-the-art micrometric setting is performed smoothly and precisely by turning the push button. Finely machined click-stops and free rotating cap prevent any unwanted volume alteration.

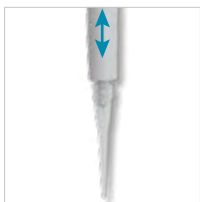
### Digital display always visible at a glance

Located on the front of the instrument, the display window allows the user to comfortably read the set volumes at any time during pipetting. A comforting reassurance for the user.

### Minimum maintenance / sterilization

Easy disassembling for thorough cleaning. Sterilization achieved by autoclaving instrument fully assembled (121°C / 250°F).





### Adjustable tip ejection

Ejector shaft height adjustment system called Justip™ allows a wide selection of tips to tightly fit the nozzle.



### Instant calibration

Swift-set user calibration system - with integrated key and locking mechanism - makes tedious procedures a thing of the past. Easy and precise, it is in full compliance with international standards and recommendations.



### Safety seal

Though easily removed when needed, the switch protection seal is autoclaving resistant.

Calibration seal stickers		Cat. No.
Replacement seals	25 / pk	1.825.025
Replacement seals	100 / pk	1.825.100



### Smartie caps colour coding at will

All Acura® manual pipettes have colour-coded button caps for individual, lab or department identifications. Pick among 14 colours or choose the smartie mix for other colour combinations.

Colour	Cat. No.	Colour	Cat. No.
Alternative colour selection (6 / pk)			
○ White	1.825.710	○ Rose	1.825.719
○ Grey	1.825.715	○ Pink	1.825.720
○ Vanilla	1.825.716	○ Purple	1.825.721
○ Lemon	1.825.712	○ Ice blue	1.825.722
○ Yellow	1.825.717	○ Blue	1.825.713
○ Orange	1.825.718	○ Mint	1.825.723
○ Red	1.825.714	○ Green	1.825.711
Smartie mix, assorted colours (14 / pk)			1.825.700



# Manual micropipettes

## The Acura® manual 825

There is a choice between 825 model, the classic one for all applications and 826XS micropipette specially dedicated to research. Both lines bring much more than superior performance and make pipetting safe and comfortable. Three-year warranty.

- Smart and reliable volume adjustment
- Single-handed volume setting
- Precision digital display visible at all time
- Justip™ adjustable tip ejector fitting most tips
- Swift-set user calibration system
- Shock, UV light and autoclaving resistance



## 825 micro

- 0.1 - 2 µL
- 0.5 - 10 µL
- 1 - 10 µL
- 2 - 20 µL
- 5 - 50 µL
- 10 - 100 µL
- 20 - 200 µL
- 100 - 1000 µL

### Pipette part materials

Parts potentially in contact with vapours are made of selected materials providing excellent chemical resistance.

Parts	Materials
Tip ejector	PVDF
Barrel	PVDF
Plunger micro, up to 100 µL	Stainless steel
Plunger micro 200 - 1000 µL	PVDF
Plunger macro	Stainless steel/PVDF
Plunger multi up to 50 µL	Stainless steel
Plunger multi 100 to 350 µL	PPS
Tightness ring micro up to 20 µL	PTFE sleeve
Tightness ring micro 50 - 1000 µL	FPM with PTFE sleeve
Tightness ring macro	FPM (x-ring)
Tightness ring multi up to 20 µL	PTFE sleeve
Tightness ring multi 50 to 350 µL	FPM

### Performance and tip style / Weights and ordering information Acura® manual 825 and 826XS

Volume	Division	Inaccuracy (E%)			Imprecision (CV%)		
		Min. vol.	Mid. vol.	Max. vol.	Min. vol.	Mid. vol.	Max. vol.
0.1 - 2 µL	0.002 µL	<± 6.0 % <sup>1</sup>	<± 4.0 %	<± 2.0 %	< 5.0 % <sup>1</sup>	< 3.3 %	< 1.5 %
0.5 - 10 µL	0.01 µL	<± 2.5 % <sup>2</sup>	<± 1.8 %	<± 1.0 %	< 1.8 % <sup>2</sup>	< 1.2 %	< 0.5 %
1 - 10 µL	0.01 µL	<± 2.5 %	<± 1.8 %	<± 1.0 %	< 2.5 %	< 1.6 %	< 0.7 %
2 - 20 µL	0.02 µL	<± 2.5 %	<± 1.8 %	<± 1.0 %	< 1.7 %	< 1.0 %	< 0.5 %
5 - 50 µL	0.1 µL	<± 1.5 %	<± 1.3 %	<± 1.0 %	< 1.0 %	< 0.7 %	< 0.4 %
10 - 100 µL	0.1 µL	<± 1.5 %	<± 1.2 %	<± 0.8 %	< 1.0 %	< 0.6 %	< 0.2 %
20 - 200 µL	0.2 µL	<± 1.5 %	<± 1.1 %	<± 0.6 %	< 0.6 %	< 0.4 %	< 0.2 %
100 - 1000 µL	1 µL	<± 1.5 %	<± 1.0 %	<± 0.5 %	< 0.5 %	< 0.4 %	< 0.2 %

Performance values obtained with bidest. water at constant temperature (± 0.5°C) comprised between 20 and 25°C in accordance with ISO 8655.  
<sup>1</sup> measured at 0.5 µL <sup>2</sup> measured at 1 µL

# Manual micropipettes

**Extra sharp XS**

## The Acura® manual 826XS

Derived from the Acura® manual 825, the 826XS line was designed with the research scientists in mind. Shorter, smoother, lighter in weight, the eight models offer key features aiming at excellence in pipetting. Three-year warranty.

- Excellent ergonomic shape and size ratio
- Springs and tightness seal for extra-smooth activation
- Reduced weight - lighter than leading brands
- Increased driveability with short, narrow shaft
- Conical shaft end for easy reach in smaller microtubes



## 826XS extra sharp

- 0.1 - 2 µL
- 0.5 - 10 µL
- 1 - 10 µL
- 2 - 20 µL
- 5 - 50 µL
- 10 - 100 µL
- 20 - 200 µL
- 100 - 1000 µL

Pipetting		Overshoot	
Start	End	Start	End
≤16 N*	≤ 2.8 N*	≤ 9.3 N*	≤ 11.5 N*

**Extra smooth activation**

Unique tightness lip seal and new springs provide for ultra-soft pipetting, reducing hand fatigue while working. Above forces, measured on a 20 - 200 µL model, are indicative of very limited finger efforts. Yet, the overshoot stop offers a clear tactile indicator.

\* 1 Newton (N) ~ 0.1 kilogramme force (kgf)

Short shaft enhances precision of hand movement and guarantees superior driveability. A great help in fine applications such as pipetting in microtubes or microplates.

Tip style	Weight		Cat. No.		Volume
	825	826XS	825	826XS	
Ultra 10 µL	88 gr	84 gr	825.0002	826.0002	0.1 - 2 µL
Ultra 10 µL	88 gr	84 gr	825.0010	826.0010	0.5 - 10 µL
200 µL	88 gr	85 gr	825.0010Y	826.0010Y	1 - 10 µL
200 µL	88 gr	85 gr	825.0020	826.0020	2 - 20 µL
200 µL	90 gr	86 gr	825.0050	826.0050	5 - 50 µL
200 µL	92 gr	87 gr	825.0100	826.0100	10 - 100 µL
200 µL	90 gr	86 gr	825.0200	826.0200	20 - 200 µL
1000 µL	95 gr	88 gr	825.1000	826.1000	100 - 1000 µL

## Micropipette saver packs

**Pipette packs offer an extended choice of volume combinations, covering all individual requirements in any research or routine application. Available at attractive saver prices, they match with today's budget constraints.**

### The Acura® manual 825 / 835 Triopack

- Three adjustable micropipettes
- Large choice of volume combinations up to 10 mL
- Nine different packs



#### Ordering information - Triopack

Including samples of Qualitix® pipette tips, silicone grease, QC certificates and operating instructions

Pack	Contents (micro/macropipette models)			Cat. No.
C	2 µL (0.1 - 2)	10 µL (0.5 - 10)	50 µL (5 - 50)	825.TRIO.C
J	2 µL (0.1 - 2)	20 µL (2 - 20)	200 µL (20 - 200)	825.TRIO.J
M	10Y µL (1 - 10)	50 µL (5 - 50)	200 µL (20 - 200)	825.TRIO.M
O	10 µL (0.5 - 10)	100 µL (10 - 100)	1000 µL (100 - 1000)	825.TRIO.O
P	10Y µL (1 - 10)	100 µL (10 - 100)	1000 µL (100 - 1000)	825.TRIO.P
S	20 µL (2 - 20)	200 µL (20 - 200)	1000 µL (100 - 1000)	825.TRIO.S
T	50 µL (5 - 50)	200 µL (20 - 200)	1000 µL (100 - 1000)	825.TRIO.T
V	100 µL (10 - 100)	1000 µL (100 - 1000)	5 mL (0.5 - 5)	825.TRIO.V
Y	1000 µL (100 - 1000)	5 mL (0.5 - 5)	10 mL (1 - 10)	835.TRIO.Y

### The Acura® manual 826 TwiXS pack

- Two adjustable volume pipettes
- Free shelf pipette holder (see page 19)
- Volume combinations from 2 to 1000 µL
- Six different packs



#### Ordering information - TwiXS pack

Including shelf pipette holder, samples of Qualitix® pipette tips, silicone grease, QC certificates and operating instructions

Pack	Contents (micropipettes)		Cat. No.
E	2 µL (0.1 - 2)	20 µL (2 - 20)	826.TWX.E
G	10 µL (0.5 - 10)	100 µL (10 - 100)	826.TWX.G
H	20 µL (2 - 20)	200 µL (20 - 200)	826.TWX.H
K	50 µL (5 - 50)	200 µL (20 - 200)	826.TWX.K
N	100 µL (10 - 100)	1000 µL (100 - 1000)	826.TWX.N
Q	200 µL (20 - 200)	1000 µL (100 - 1000)	826.TWX.Q

## Manual macropipettes

## The Acura® manual 835

Instruments combining high-tech materials with user-friendly ergonomics. Optimal for in- and outdoor environmental analysis, clinical chemistry, and cell culture applications, they offer superior performance and make pipetting safer than ever. Three-year warranty.

- Smart and reliable volume adjustment
- Single-handed volume setting
- Interchangeable nozzle protection filter
- Justip™ adjustable tip ejector
- Swift-set user calibration system
- Shock, UV light and autoclaving resistance
- Pasteur pipette fitting 2 and 5 mL models

835

macro

0.2 - 2 mL

0.5 - 5 mL

1 - 10 mL

**Display always visible**

Located on the front of the instrument, the display window allows set volume to be visible at all times during pipetting. A comforting reassurance for the user.

**Smart and reliable volume adjustment**

State-of-the-art micrometric volume setting is performed smoothly and precisely by turning push button. Finely machined click-stops and free rotating cap prevent any unwanted volume alteration.

**Adjustable tip ejection system**

Ergonomically positioned, the large surface, soft-padded ejector provides for low-pressure activation. In addition, the shaft height adjustment system called Justip™ allows optimal distance setting between ejector and tip.

**Pasteur pipette adapter**

Adapter nozzles allow fitting of Pasteur pipette on Acura® manual 2 and 5 mL models in addition to polypropylene tips. The adapters have two O-rings guaranteeing proper holding and tightness of standard 2 mL Pasteur pipettes (Ø 7 mm).

**Nozzle protection filter**

Protection against liquid overflow and contamination.

(See page 27)

**Performance and ordering information**

Volume	Division	Inaccuracy (E%)			Imprecision (CV%)			Tip style	Cat. No.
		Min. vol.	Mid. vol.	Max. vol.	Min. vol.	Mid. vol.	Max. vol.		
0.2 - 2 mL	0.002 mL	<± 1.5 %	<± 1.0 %	<± 0.5 %	< 0.5 %	< 0.3 %	< 0.2 %	2 mL	835.02
								2 mL + Pasteur	835.02PP <sup>1</sup>
0.5 - 5 mL	0.01 mL	<± 1.5 %	<± 1.1 %	<± 0.6 %	< 0.6 %	< 0.5 %	< 0.3 %	5 mL	835.05
								5 mL + Pasteur	835.05PP <sup>1</sup>
1 - 10 mL	0.01 mL	<± 1.5 %	<± 0.7 %	<± 0.5 %	< 0.5 %	< 0.3 %	< 0.2 %	10 mL	835.10

Performance values obtained with bidest. water at constant temperature ( $\pm 0.5^\circ\text{C}$ ) comprised between 20 and 25°C in accordance with ISO 8655.

<sup>1</sup> Model includes Pasteur adapter nozzle.



LABCOREX

0.5 - 10 µl



# Multichannel micropipettes

## The Acura® manual 855

**Built with the users in mind, these pipettes combine high-tech materials with exceptional, user-friendly ergonomics. They extend pipetting possibilities in 96-well microplates and guarantee outstanding performance and results. Three-year warranty.**

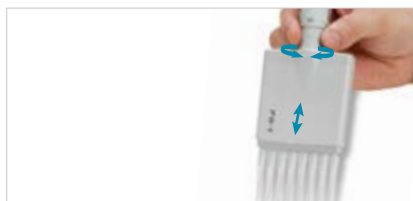
- 8- and 12-channel models up to 350 µL
- Lightweight and perfect hand fitting
- Precision display visible at all time
- Justip™ adjustable tip ejector fitting most tips
- Swift-set user calibration system
- 360° rotation of volumetric module



## 855 multi

- 0.5 - 10 µL
- 2 - 20 µL
- 5 - 50 µL
- 10 - 100 µL
- 20 - 200 µL
- 40 - 350 µL

855 models	Weight
8x 10/20 µL	155 gr
8x 50/100/200 µL	165 gr
8x 40 - 350 µL	168 gr
12x 0.5 - 10 µL	184 gr
12x 5 - 50 µL	199 gr
12x 20 - 200 µL	201 gr
12x 40 - 350 µL	203 gr



### Optimal working position

Revolving over 360°, the volumetric module (lower assembly) helps assuring the appropriate hand position.

### Most comfortable pipetting

Ergonomic shape, lightweight and ultra-soft plunger travel are key elements of the Acura® manual pipettes.

### Adjustable tip ejector

Position of tip ejector can be adjusted in no time within a 4 mm span to perfectly match with tips used. Bowed shape of ejector head guarantees effortless, easy sequential tip removal.

### Multichannel reservoirs

Well adapted for multichannel pipettes, the reagent reservoirs offer various shapes and volumes.

(See page 26)

## Performance and ordering information

Volume	Division	Inaccuracy (E%)			Imprecision (CV%)			Tip style	Cat. No.
		Min. vol.	Mid. vol.	Max. vol.	Min. vol.	Mid. vol.	Max. vol.		
<b>8-channel</b>									
0.5 - 10 µL	0.01 µL	<± 3.5 % <sup>1</sup>	<± 2.5 %	<± 1.5 %	< 3.0 % <sup>1</sup>	< 2.0 %	< 1.0 %	Ultra 10 µL	855.08.010
2 - 20 µL	0.01 µL	<± 2.5 %	<± 1.8 %	<± 1.2 %	< 2.0 %	< 1.4 %	< 0.7 %	Extended 20 µL	855.08.020
5 - 50 µL	0.1 µL	<± 1.0 %	<± 0.9 %	<± 0.8 %	< 1.0 %	< 0.7 %	< 0.4 %	200 µL	855.08.050
10 - 100 µL	0.1 µL	<± 1.0 %	<± 0.9 %	<± 0.8 %	< 0.9 %	< 0.6 %	< 0.4 %	200 µL	855.08.100
20 - 200 µL	0.2 µL	<± 0.9 %	<± 0.8 %	<± 0.7 %	< 0.6 %	< 0.5 %	< 0.3 %	200 µL	855.08.200
40 - 350 µL	0.4 µL	<± 1.0 %	<± 0.9 %	<± 0.8 %	< 0.6 %	< 0.5 %	< 0.3 %	350 µL	855.08.350
<b>12-channel</b>									
0.5 - 10 µL	0.01 µL	<± 3.5 % <sup>1</sup>	<± 2.5 %	<± 1.5 %	< 3.0 % <sup>1</sup>	< 2.0 %	< 1.0 %	Ultra 10 µL	855.12.010
5 - 50 µL	0.1 µL	<± 1.0 %	<± 0.9 %	<± 0.8 %	< 1.0 %	< 0.7 %	< 0.4 %	200 µL	855.12.050
20 - 200 µL	0.2 µL	<± 0.9 %	<± 0.8 %	<± 0.7 %	< 0.6 %	< 0.5 %	< 0.3 %	200 µL	855.12.200
40 - 350 µL	0.4 µL	<± 1.0 %	<± 0.9 %	<± 0.8 %	< 0.6 %	< 0.5 %	< 0.3 %	350 µL	855.12.350

Performance values obtained with bidest. water at constant temperature (± 0.5°C) comprised between 20 and 25°C in accordance with ISO 8655.

<sup>1</sup> measured at 1 µL

# Manual fixed volume pipettes

## The Acura® manual 815 / 835F

**Fixed volume micro and macropipettes show the most stable performance. They provide consistent results for any analytical or routine diagnostic tests by eliminating the risk of erroneous volume setting. Three-year warranty.**

- Slim ergonomic design and light weight
- Soft plunger activation
- Justip™ adjustable tip ejector fitting most tips
- User calibration with integrated key
- Colour coded smartie cap
- Selection includes macropipette volumes

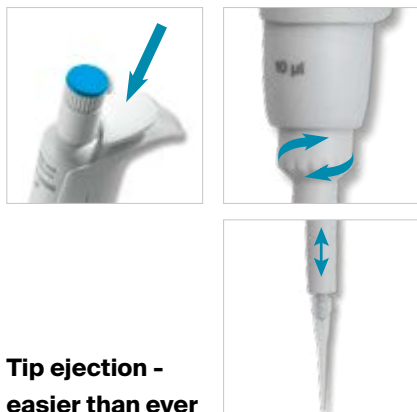
See pipette tips page [20](#)



## 815 / 835F

fixed

1 µL to 10 mL



### Tip ejection - easier than ever

Most ergonomically positioned, the large surface, soft-padded ejector button provides for low-pressure activation. In addition to ease of tip ejection, the shaft height adjustment system called Justip™ – controlled by efficient click-stops – allows a wide selection of tips to tightly fit the nozzle.

### Performance and ordering information

Volume	Inaccuracy (E%)	Imprecision (CV%)	Tip style	Cat. No.
<b>Acura® manual 815</b>				
1 µL	<± 2.0 %	< 1.0 %	Ultra 10 µL	815.0001
5 µL	<± 1.4 %	< 1.0 %	Ultra 10 µL	815.0005
10 µL	<± 0.7 %	< 0.7 %	Ultra 10 µL	815.0010
10Y µL	<± 0.7 %	< 0.8 %	200 µL	815.0010Y
15 µL	<± 0.7 %	< 0.5 %	200 µL	815.0015
20 µL	<± 0.75 %	< 0.5 %	200 µL	815.0020
25 µL	<± 0.7 %	< 0.6 %	200 µL	815.0025
30 µL	<± 0.7 %	< 0.6 %	200 µL	815.0030
32 µL	<± 0.7 %	< 0.6 %	200 µL	815.0032
40 µL	<± 0.7 %	< 0.5 %	200 µL	815.0040
50 µL	<± 0.7 %	< 0.4 %	200 µL	815.0050
60 µL	<± 0.7 %	< 0.5 %	200 µL	815.0060
70 µL	<± 0.7 %	< 0.4 %	200 µL	815.0070
75 µL	<± 0.7 %	< 0.4 %	200 µL	815.0075
80 µL	<± 0.7 %	< 0.35 %	200 µL	815.0080
90 µL	<± 0.7 %	< 0.3 %	200 µL	815.0090
100 µL	<± 0.7 %	< 0.3 %	200 µL	815.0100
120 µL	<± 0.7 %	< 0.4 %	200 µL	815.0120

Volume	Inaccuracy (E%)	Imprecision (CV%)	Tip style	Cat. No.
<b>Acura® manual 815 (continued)</b>				
150 µL	<± 0.7 %	< 0.3 %	200 µL	815.0150
200 µL	<± 0.7 %	< 0.3 %	200 µL	815.0200
250 µL	<± 0.7 %	< 0.4 %	1000 µL	815.0250
300 µL	<± 0.7 %	< 0.4 %	1000 µL	815.0300
400 µL	<± 0.7 %	< 0.3 %	1000 µL	815.0400
500 µL	<± 0.7 %	< 0.3 %	1000 µL	815.0500
600 µL	<± 0.7 %	< 0.3 %	1000 µL	815.0600
700 µL	<± 0.7 %	< 0.2 %	1000 µL	815.0700
750 µL	<± 0.7 %	< 0.2 %	1000 µL	815.0750
800 µL	<± 0.7 %	< 0.2 %	1000 µL	815.0800
900 µL	<± 0.7 %	< 0.2 %	1000 µL	815.0900
1000 µL	<± 0.6 %	< 0.2 %	1000 µL	815.1000
<b>Acura® manual 835F</b>				
2 mL	<± 0.5 %	< 0.2 %	2 mL	835.F02
2.5 mL	<± 0.8 %	< 0.5 %	5 mL	835.F02.5
5 mL	<± 0.6 %	< 0.3 %	5 mL	835.F05
10 mL	<± 0.5 %	< 0.2 %	10 mL	835.F10

Performance values obtained with bidest. water at constant temperature (± 0.5°C) comprised between 20 and 25°C in accordance with ISO 8655.

## 1:10 dilution pipette

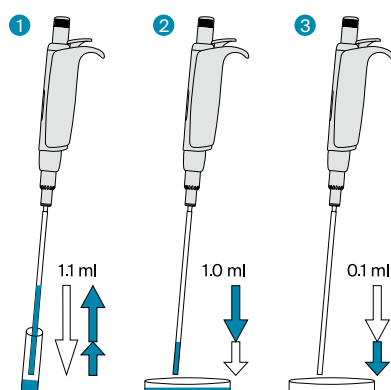
## The Acura® dilute 810

**Air displacement pipette with two pre-calibrated steps allows subsequent pipetting of 1 and 0.1 mL of the same liquid. Metal nozzle fits long straw tips to aspirate from narrow or deep reservoirs (i.e. Stomacher® bags). Ideal alternative to the graduated glass pipettes when performing serial 1:10 dilutions in bacteriology. Three-year warranty.**

- Two pre-calibrated fixed volumes – no setting required
- Smooth activation, excellent ergonomics
- Interchangeable PE nozzle protection filter
- Justip™ system for height adjustment of tip ejector
- Independent calibration for each volume
- Easy maintenance, cleaning and disinfection
- Fully autoclavable at 121°C / 250°F

810

1 + 0.1 mL



## Simple operation

- 1 Depress plunger button in full, then release slowly to aspirate 1.1 mL
- 2 Depress plunger button to first stop, thus dispensing 1 mL in Petri dish
- 3 Depress plunger button to second stop, thus dispensing residual 0.1 mL in next Petri dish



## No setting required

Two fixed volumes within one plunger travel.

## Innovative dual calibration

Both volumes of 1 mL and 0.1 mL can be calibrated independently from each other. Calibration switch protected by seal sticker.

## Justip™ ejector

Turn left or right to adjust ejector to straw tip position on the nozzle.

## Straw tips

First class polypropylene. Size 190 mm. Specially designed for narrow vials and Stomacher® bags. Large diameter (4 mm) prevents blocking by particles in suspension.

## Performance and ordering information - Instrument

Volume	Inaccuracy (E%)	Imprecision (CV%)	Cat. No.
1 mL	<± 0.5 %	< 0.4 %	810.1100
0.1 mL	<± 2.0 %	< 2.5 %	

Performance values obtained with bi-dist. water at constant temperature (± 0.5°C) comprised between 20 and 25°C in accordance with ISO 8655.

## Ordering information - Accessories

Description	Packaging	Cat. No.
Straw tips, polypropylene, sterilized (L: 190 mm, Ø: 4 mm)	40x 25 / pk	313.1119.40
Nozzle protection filter, PE material	100 / pk	322.810
Pipette stand 340 for 3 pipettes	1 / pk	320.340
Shelf pipette holder 332 for 2 pipettes	1 / pk	320.332
Shelf pipette holder 332 for 2 pipettes, multipack	4 / pk	320.332.4

# Pipette stands

The two universal micropipette stands fit all brands, ensuring their proper storage at any time. Anti-slip pads guarantee bench stability. Easy to clean.



## 336

### Twister™ universal 336

- 6 positions
- 360° soft rotation
- Instruments easy to pick-up
- Concept fits pipettes of all brands
- Interchangeable discs
- 7 translucent colours



#### Universal storage solution

No more micropipettes laying on the bench thanks to universal stands. They accommodate Socorex and other brands micropipettes. Simple disassembling and cleaning.

#### Ordering information

Colour	Packaging	Cat. No.
<b>Twister™ universal 336</b>		
Rubin red	1/ pk	320.336R
Topaz orange	1/ pk	320.336O
Citrine yellow	1/ pk	320.336Y
Emerald green	1/ pk	320.336G
Sapphire blue	1/ pk	320.336B
Quartz grey	1/ pk	320.336Q
Diamond white	1/ pk	320.336W



## 337

### In-line™ universal 337

- 7 positions
- Holds single channel pipettes of all brands
- Space-saving pipette stand
- Sturdy polyamide material
- 5 attractive pastel colours



#### In-line™ universality

One fits all; the stand holds new and old generations of Socorex and other brands micropipettes.

#### Ordering information

Colour	Packaging	Cat. No.
<b>In-line™ universal 337</b>		
Light grey	1/ pk	320.337G
Pastel rose	1/ pk	320.337R
Ice blue	1/ pk	320.337B
Mint green	1/ pk	320.337M
Vanilla yellow	1/ pk	320.337Y

**Proper micropipette storage prevents damages and extends their life span. Socorex offers a choice of stands adapted to any laboratory configuration.**



## 332

### Shelf pipette holder 332

- 2 positions
- Fitting micro, macro and multichannel pipettes



#### Holder for two instruments

The attractive design accommodates Acura® instruments, including microdispenser pipettes Acura® 810, positive displacement pipettes Acura® 846 and microdispenser pipettes Acura® 865. A self-adhesive strip supplied ensures lasting attachment on any clean surface. Made of polycarbonate material.

#### Ordering information

Colour	Packaging	Cat. No.
Transparent blue	1 / pk	320.332
Transparent blue	4 / pk	320.332.4



## 340

### Static pipette stand 340

- 3 positions
- Fitting micro, macro and/or multichannel Socorex pipettes
- Easy reach of each instrument



#### Extended compatibility

Pipette stand 340 also accommodates dilution pipette Acura® 810, positive displacement pipettes Acura® 846 and microdispenser pipettes Acura® 865. Heavy-bottom plate and anti-slip pads guarantee high stability. Made of polyamide material.

#### Ordering information

Colour	Packaging	Cat. No.
Light grey	1 / pk	320.340

# Premium pipette tips

## The Qualitix® pipette tips from 10 µL to 10 mL

The Qualitix® pipette tip programme is all about quality, flexibility and compatibility. An extended line for accurate liquid delivery, fitting not only Socorex but all major micropipette brands. Packaging selection (bags, racks and *tipfill*™ rack filling system), together with a choice of tip styles with and without protection filter, offer appreciated versatility. Qualitix® and Socorex micropipettes are the most perfect match for optimized test results.

- Wide selection, superior quality, autoclavable
- Bags, racks and *tipfill*™ rack filling system
- Lot by lot consistency
- Certified free of nuclease, endotoxin and ATP
- Reduced packaging size, less bench space requirement
- Broad compatibility with major micropipette brands

Free samples on request 



### Beveled and fine pointed

Beveled tip end **a** greatly reduces sticking of liquid drops. Fine pointed tips **b** have a thin and soft end, enabling small liquid volume deposit, thus enhancing reproducibility in repeat pipetting. A long and soft end is appropriate for gel loading **c**.



### Aerosol protection - No contamination

Filter tips include a 10 µm pore hydrophobic HDPE filter to retain any contaminant, efficiently protecting both pipette and sample. Certified high tip purity and gamma irradiation.



### Low retention - Maximal recovery

Low binding tips **a** are made of silicone-free resin, greatly reducing surface adhesion and providing maximal liquid recovery. Available in 10, 200 and 1000 µL capacities, in sterile and non-sterile racks. Also protease-free certified, they are best suited for proteomic research and accurate handling of viscous liquids.

### Qualitix® *bioproof*™ level

The Qualitix® line is free of detectable DNase, RNase, Pyrogen (Endotoxins) and ATP. Filter tips are additionally certified free of detectable human DNA and protease.



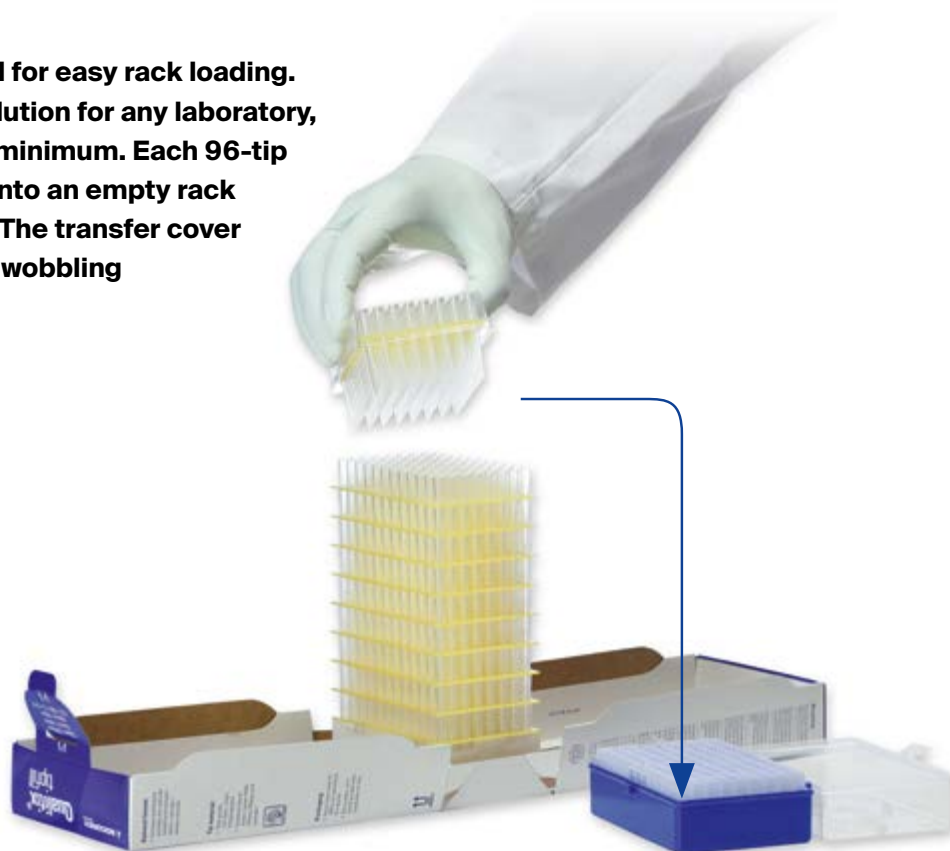
View certificate

## Rack filling system

The *tipfill™* packs are intended for easy rack loading. A practical and economical solution for any laboratory, limiting work interruption to a minimum. Each 96-tip insert is instantly transferred into an empty rack without risk of contamination. The transfer cover keeps tips clean and prevents wobbling during refilling.



See video



### Packaging options

Tips available in bags, hinged lid racks and *tipfill™* rack filling system.

### Space reduction

The smart re-closable *tipfill™* box uses far less space than corresponding amount of conventional racks and produces less plastic waste. This has a direct impact on storage requirement, shipping costs and environment.

### Environmental aspects

Packaging is optimized to ensure good protection while using minimal cardboard material.










## Application guide



Tip style	Features	Benefits
Regular tips	Superior quality, optimal and universal pipette fitting.	Common use in daily pipetting with Socorex and other pipette brands.
Filter tips	Same as above, includes 10 µm pore size hydrophobic HDPE protection filter.	Efficient protection for both pipette and sample against aerosol contamination.
Low binding tips	Special material provides for very low surface retention.	Accurate handling of thick, viscous liquids and protein/peptide samples.
Gel loading tips	Long, thin and soft tip end, universal fitting.	Precise sample distribution in confined area without damaging gel structure.
Extended tips	Long tip length, universal fitting.	Easy access into narrow, deep tubes while limiting contact with tube wall.
Saver tips	Reliable tips, universal pipette fitting.	Economical bulk packaging, best suited for large tip projects.

# Premium pipette tips

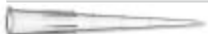



## Ordering information - Qualitix® pipette tip selection

10 - 20 µL Tips	Size mm	Description		Sterile	Packaging		Cat. No.
		Colour	Style		Pack	Case	
	31.4	Natural	10 µL ultra-microtips, fine pointed, graduated, autoclavable		1000 / bag	10 bags	3090.0010B
		Natural	10 µL ultra-microtips, fine pointed, graduated, autoclavable		12x 96 / rack	10 packs	3090.0010R
	tipfill	Natural	10 µL tipfill™ system incl. ultra-microtips, fine pointed, graduated		13x 96 / pack	10 packs	3090.0010T
			Empty rack for 10 / 200 µL tips to be used with tipfill™ system, autoclavable		10 / pack	10 packs	3070.0210ER
	38.1	Natural	10 µL ultra-microtips, fine pointed, graduated, autoclavable	✓	12x 96 / rack	10 packs	3090.0010RS
		Natural	20 µL extended microtips, fine pointed, autoclavable		1000 / bag	10 bags	3020.0010B
	38.1	Natural	20 µL extended microtips, fine pointed, autoclavable		10x 96 / rack	10 packs	3020.0010R
		Natural	20 µL extended microtips, fine pointed, autoclavable		10x 96 / rack	10 packs	3020.0010R
	71.0	Natural	10 µL capillary tips for gel loading, autoclavable		4x 204 / rack	N / A	302.0010GR
	38.3	Natural	10 µL saver ultra-microtips, fine pointed, autoclavable		1000 / bag	10 bags	3070.0010B
			Empty rack for autoclaving 10 µL saver ultra-microtips 3070.0010B		1 / pack	N / A	3070.0010ER
















10 - 20 µL Filter Tips	Size mm	Description		Sterile	Packaging		Cat. No.
		Colour	Style		Pack	Case	
	31.4	Natural	10 µL ultra-microtips, with filter, fine pointed, graduated	✓	12x 96 / rack	10 packs	3090.0010FRS
	38.1	Natural	20 µL extended microtips, with filter, fine pointed	✓	10x 96 / rack	10 packs	3020.0010FRS

10 - 20 µL Low Protein Binding Tips	Size mm	Description		Sterile	Packaging		Cat. No.
		Colour	Style		Pack	Case	
	31.4	Natural	10 µL ultra-microtips, low binding, fine pointed, autoclavable		12x 96 / rack	10 packs	3090.0010PR
		Natural	10 µL ultra-microtips, low binding, fine pointed, autoclavable	✓	12x 96 / rack	10 packs	3090.0010PRS
	38.1	Natural	20 µL extended microtips, low binding, fine pointed, autoclavable		10x 96 / rack	10 packs	3020.0010PR
		Natural	20 µL extended microtips, low binding, fine pointed, autoclavable	✓	10x 96 / rack	10 packs	3020.0010PRS

20 - 100 µL Filter Tips	Size mm	Description		Sterile	Packaging		Cat. No.
		Colour	Style		Pack	Case	
	49.6	Natural	20 µL filter tips, bevel point	✓	10x 96 / rack	10 packs	3080.0020FRS
	49.6	Natural	100 µL filter tips, bevel point	✓	10x 96 / rack	10 packs	3080.0100FRS

200 µL Tips	Size mm	Description		Sterile	Packaging		Cat. No.
		Colour	Style		Pack	Case	
	49.6	Natural	200 µL universal tips, bevel point, graduated, autoclavable		1000 / bag	10 bags	3070.0200B
		Natural	200 µL universal tips, bevel point, graduated, autoclavable		10x 96 / rack	10 packs	3070.0200R
	tipfill	Natural	200 µL tipfill™ system incl. universal tips, bevel point, graduated		10x 96 / pack	10 packs	3070.0200T
			Empty rack for 10 / 200 µL tips to be used with tipfill™ system, autoclavable		10 / pack	10 packs	3070.0210ER
	49.6	Natural	200 µL universal tips, bevel point, graduated, autoclavable	✓	10x 96 / rack	10 packs	3070.0200RS
		Yellow	200 µL regular tips, bevel point, autoclavable		1000 / bag	10 bags	3290.0200B
		Yellow	200 µL regular tips, bevel point, autoclavable		10x 96 / rack	10 packs	3290.0200R
	49.6	Yellow	200 µL regular tips, bevel point, autoclavable	✓	10x 96 / rack	10 packs	3290.0200RS
		Natural	200 µL capillary tips for gel loading, autoclavable		6x 96 / rack	8 packs	3080.0200GR
	49.5	Natural	200 µL saver tips, autoclavable		1000 / bag	10 bags	3070.0200B
		Yellow	200 µL saver tips, autoclavable		1000 / bag	10 bags	3270.0200B
			Empty rack for autoclaving 200 µL saver tips, 3070.0200B and 3270.0200B		1 / pack	N / A	3270.0200ER



























200 µL Filter Tips	Size mm	Description		Sterile	Packaging		Cat. No.	
		Colour	Style		Pack	Case		
	51.2	Natural	200 µL universal tips with filter, bevel point	✓	10x 96 / rack	10 packs	3070.0200FRS	
	83.8	Natural	200 µL extended tips with filter, fine pointed	✓	6x 96 / rack	8 packs	3080.0200LFRS	
200 µL Low Protein Binding Tips	Size mm	Description		Sterile	Packaging		Cat. No.	
		Colour	Style		Pack	Case		
	49.6	Natural	200 µL universal tips, low binding, graduated, autoclavable		10x 96 / rack	10 packs	3070.0200PR	
		Natural	200 µL universal tips, low binding, graduated, autoclavable	✓	10x 96 / rack	10 packs	3070.0200PRS	
350 µL Tips	Size mm	Description		Sterile	Packaging		Cat. No.	
		Colour	Style		Pack	Case		
	58.8	Natural	350 µL regular tips, autoclavable		1000 / bag	N / A	308.0350B	
		Natural	350 µL regular tips, autoclavable		10x 96 / rack	N / A	308.0350R	
300 µL Filter Tips	Size mm	Description		Sterile	Pack	Case	Cat. No.	
	58.8	Natural	300 µL regular tips with filter	✓	10x 96 / rack	N / A	308.0300FR	
1000 µL Tips	Size mm	Description		Sterile	Packaging		Cat. No.	
		Colour	Style		Pack	Case		
		88.9	Natural	1000 µL universal tips, fine pointed, autoclavable		1000 / bag	10 bags	3070.1000B
			Natural	1000 µL universal tips, fine pointed, autoclavable		6x 96 / rack	8 packs	3070.1000R
		tipfill	Natural	1000 µL tipfill™ system incl. universal tips, fine pointed		5x 96 / rack	10 packs	3070.1000T
				Empty rack for 1000 µL tips to be used with tipfill™ system, autoclavable		6 / pack	8 packs	3070.1000ER
		75.9	Natural	1000 µL universal tips, fine pointed, autoclavable	✓	6x 96 / rack	8 packs	3070.1000RS
			Blue	1000 µL regular tips, bevel point, autoclavable		1000 / bag	10 bags	3190.1000B
			Blue	1000 µL regular tips, bevel point, autoclavable		6x 96 / rack	8 packs	3190.1000R
		75.9	Blue	1000 µL regular tips, bevel point, autoclavable	✓	6x 96 / rack	8 packs	3190.1000RS
			Natural	1000 µL regular tips, bevel point, graduated, autoclavable		1000 / bag	10 bags	3090.1000B
			Natural	1000 µL regular tips, bevel point, graduated, autoclavable		6x 96 / rack	8 packs	3090.1000R
	70.9	Natural	1000 µL saver tips, autoclavable		1000 / bag	N / A	307.1000B	
		Blue	1000 µL saver tips, autoclavable		1000 / bag	N / A	317.1000B	
			Empty rack for autoclaving 1000 µL saver tips 317.1000B and 307.1000B		1 / pack	N / A	317.1000ER	
1000 µL Filter Tips	Size mm	Description		Sterile	Pack	Case	Cat. No.	
	88.9	Natural	1000 µL universal tips, with filter, fine pointed, autoclavable	✓	6x 96 / rack	8 packs	3070.1000FRS	
1000 µL Low Protein Binding Tips	Size mm	Description		Sterile	Packaging		Cat. No.	
		Colour	Style		Pack	Case		
	88.9	Natural	1000 µL universal tips, low binding, fine pointed, autoclavable		6x 96 / rack	8 packs	3070.1000PR	
		Natural	1000 µL universal tips, low binding, fine pointed, autoclavable	✓	6x 96 / rack	8 packs	3070.1000PRS	
2, 5, 10 mL Macrotips	Size mm	Description		Sterile	Packaging		Cat. No.	
		Colour	Style		Pack	Case		
		115.5	Natural	2 mL macrotips, autoclavable		2x 250 / bag	N / A	312.02
			Natural	2 mL macrotips, autoclavable		30x 250 / bag	N / A	312.02XLB
				Empty rack for 50 x 2 mL macrotips, autoclavable		2 / pack	N / A	312.02ER
		123.2	Natural	5 mL macrotips, graduated, autoclavable		2x 250 / bag	N / A	312.05B
			Natural	5 mL macrotips, graduated, autoclavable		25x 250 / bag	N / A	312.05XLB
			Natural	5 mL macrotips, graduated, autoclavable		2x 50 / rack	N / A	312.05R
	150.0	Natural	10 mL macrotips, autoclavable		3x 100 / bag	N / A	312.10	
		Natural	10 mL macrotips, autoclavable		40x 100 / bag	N / A	312.10XLB	
		Natural	Empty rack for 24x 10 mL macrotips, autoclavable		4 / pack	N / A	312.10ER	

B = bag, E = empty, F = filter, G = gel, L = long, P = low binding, R = rack, S = sterile, T = tipfill™ refill system, XLB = bulk tips in bags

## Socorex compatibility chart

Chart indicates optimal combination of Qualitix® and Socorex pipettes.

Acura® manual and Acura® electro

		815					825 / 826 / 926					835 / 936			855 / 956									
		Up to 10 µL	10 y/15/20 µL	25 to 100 µL	120 to 200 µL	250 to 1000 µL	0.1 - 2 µL	0.5 - 10 µL	1 - 10 µL (V)	2 - 20 µL	5 - 50 µL	10 - 100 µL	20 - 200 µL	100 - 1000 µL	0.2 - 2 mL	0.5 - 5 mL	1 - 10 mL	0.5 - 10 µL	2 - 20 µL	5 - 50 µL	10 - 100 µL	20 - 200 µL	40 - 350 µL	
<b>10-20 µL ultra and microtips</b>																								
	Tip ref. 3090	●					●	●																
	Tip ref. 3020	●					●	●											●					
	Tip ref. 302	● <sup>2</sup>						● <sup>2</sup>																
	Tip ref. 3090	●					●	●											●					
	Tip ref. 3020	●					●	●											●					
	Tip ref. 307	●					●	●											●					
<b>20 - 100 µL Tips</b>																								
	Tip ref. 3080		●						●	●	● <sup>1</sup>									● <sup>1</sup>				
	Tip ref. 3080			●						●	●	● <sup>1</sup>								●	●	● <sup>1</sup>		
<b>200 µL Tips</b>																								
	Tip ref. 3070		●	●	●				●	●	●	●	●							●	●	●		
	Tip ref. 3290		●	●	●				●	●	●	●	●							●	●	●		
	Tip ref. 3080				●					●	●	●	●											
	Tip ref. 3070			●	●								●										●	
	Tip ref. 3080				●								●										●	
	Tip ref. 307/327		●	●	●				●	●	●	●	●							●	●	●		
<b>300 - 350 µL Tips</b>																								
	Tip ref. 308				●							●	●										●	
	Tip ref. 308				●							●											● <sup>1</sup>	
<b>1000 µL Tips</b>																								
	Tip ref. 3070				●								●											
	Tip ref. 3190				●								●											
	Tip ref. 3090				●								●											
	Tip ref. 3070				●								●											
	Tip ref. 307/317				●								●											
<b>2, 5, 10 mL Macrotips</b>																								
	Tip ref. 312														●									
	Tip ref. 312															●								
	Tip ref. 312																●							

<sup>1</sup> Up to max. tip volume    <sup>2</sup> For volumes > 2 µL



## Reagent reservoirs



### V-shape reservoirs, 75 mL

Re-usable and autoclavable polypropylene. Embossed graduations guarantee long lasting legibility. Round corners enable convenient reagent pouring. Bottom shape ensures bench stability. Bring maximal flexibility for routine work with single and multichannel pipettes.



### V-shape reservoirs, with lid, 125 mL

Re-usable and autoclavable polypropylene. Hinged lid closure. Microplate format guarantees excellent stability. Stackable for space saving storage. V-shape bottom enables aspiration until last reagent drops. Suited for single and multichannel pipetting.



### Ordering information - V-shape reservoirs

Description	Dimensions	Volume	Colour	Style	Lid	Material	Sterile	Packaging	Cat. No.
Reservoir	58 x 132 x 25 mm	75 mL	Natural	V-shaped	No	PP	No	20 / pk	330.01
Reservoir	83 x 121 x 34 mm	125 mL	Natural	V-shaped	Yes, hinged	PP	No	20 / pk	330.01L

Free samples on request



### Multichannel reservoirs, non-sterile, 48 mL

8- and 12-channel polystyrene reservoirs. Each channel with round bottom. Total capacity 48 mL. Good bench stability. Microplate format enables use with automated, robotic pipetting devices and multichannel pipettes.



### Multichannel reservoirs, sterilized, 48 mL

Single wrapped 8- and 12-channel polystyrene reservoirs to be used in clean environment. Sterilized by X-ray radiation. Each channel with round bottom. Total capacity 48 mL. Good bench stability. Lot number facilitates traceability.



### Ordering information - Multichannel reservoirs

Description	Dimensions	Volume	Colour	Style	Lid	Material	Sterilized	Packaging	Cat. No.
Reservoir	83 x 126 x 13 mm	8x 6 mL	White	8-channel	No	PS	no	30 / pk	330.08
Reservoir	83 x 126 x 13 mm	8x 6 mL	White	8-channel	No	PS	no	100 / pk	330.08XL
Reservoir	83 x 126 x 13 mm	8x 6 mL	White	8-channel	No	PS	yes	10x 1 / pk	330.08.9
Reservoir	83 x 126 x 13 mm	12x 4 mL	White	12-channel	No	PS	no	30 / pk	330.12
Reservoir	83 x 126 x 13 mm	12x 4 mL	White	12-channel	No	PS	no	100 / pk	330.12XL
Reservoir	83 x 126 x 13 mm	12x 4 mL	White	12-channel	No	PS	yes	10x 1 / pk	330.12.9

Free samples on request



## Pasteurs, straws and filters



### Glass Pasteur pipette

Standard Pasteur models fitting 2 and 5 mL Acura® *manual* / *electro* macropipettes with their respective adapters. Useful alternative to macrotips, for instance when handling PP affecting reagents. Model and size selection fit most lab requirements.

### Pasteur pipette adapters

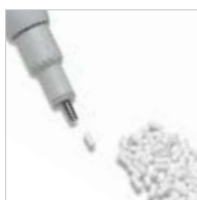
Dedicated PVDF adapters with two internal O-rings tightly fitting glass Pasteur pipette (ext Ø 6.5 – 7.2 mm), without excluding the use of regular PP tips.

### Ordering information - Pasteur pipettes

Material	Volume	Dimensions (l x Ø mm)	Packaging	Cat. No.
Glass	2 mL	150 x 7	250 / pk	313.02.150
Glass	2 mL	230 x 7	250 / pk	313.02.230
Glass with cotton plug	2 mL	150 x 7	250 / pk	313.02.150C
Glass with cotton plug	2 mL	230 x 7	250 / pk	313.02.230C

### Ordering information - Pasteur adapters

Fits macropipette	Packaging	Cat. No.
Acura® <i>manual</i> 835, 2 mL	1 / pk	1.835.631
Acura® <i>electro</i> 936, 2 mL		
Acura® <i>manual</i> 835, 5 mL	1 / pk	1.835.633
Acura® <i>electro</i> 936, 5 mL		



### Straw tips

Fitting the Acura® *dilute* 810 pipette. The long and thin straw tips allow pick-up of particle containing liquids in Stomacher® bags and deep, narrow reservoirs. Supplied sterilized in resealable bag.

### Nozzle filters for pipettes

Protection against liquid overflow or aerosol contamination. Filters are interchangeable, non-sterile, non autoclavable.

### Ordering information - Straw tips and nozzle filters

Description	Fits	Material	Size (l x Ø mm)	Packaging	Cat. No.
Straw tips, 1.1 mL	Acura® <i>dilute</i> 810	PP, sterilized	190 x 4	40x25 / pk	313.119.40
Nozzle filter	Acura® <i>dilute</i> 810	PE	6.3 x 2.5	100 / pk	322.810
Nozzle filter	Calibra® <i>digital</i> 832, 2 mL	Cellulose	22 x 7	250 / bag	322.02
Nozzle filter	Acura® <i>manual</i> 835, 2 and 5 mL Acura® <i>electro</i> 936, 2 and 5 mL	PP fiber	20 x 7.5	50 / bag	322.05
Nozzle filter	Calibra® <i>digital</i> 832, 10 mL Acura® <i>manual</i> 835, 10 mL Acura® <i>electro</i> 936, 10 mL	PP fiber	30 x 10.5	50 / bag	322.10

# Sterilization pouches

## The Qualitix® sterilization pouches

Fitting any small to mid-size laboratory, medical, dental or veterinary device, the Qualitix® single use pouches provide easy and effective wrapping of items requiring sterilization. Made with robust medical grade paper, the pouches tightly close with self-sealing strip to maintain sterility. Content remains always visible through PET / CPP transparent laminated film.

- Robust durable material
- Quick content identification
- Large self-sealing strip, easy to close
- Chevron top seal for easy opening
- Suitable for steam and EO gas sterilization
- Two sterilization indicators
- Five different sizes
- Conformity to ISO 17665, ISO 11135, MDR 2017/745



Free samples on request



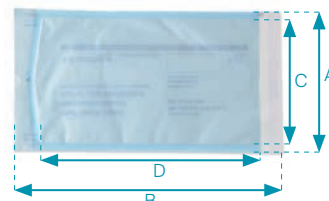
### Sterilization indicators

Two chemical indicators included to confirm proper sterilization process. Blue indicator turns dark grey after autoclaving, red indicator turns to yellow after ethylene oxide (EO) gas sterilization.



### Self-sealing - quick opening

Simply peel off protection strip, fold and press with fingers. Pouch remains tightly sealed to maintain product sterility.



### Dimensions

A (mm)	B (mm)	C (mm)	D (mm)
83	160	65	110
90	260	70	205
135	260	115	205
190	360	170	300
250	370	220	275
300	395	270	335
300	490	270	390

### Integrity control

Blue stained laminated film enables easy control of film/pouch integrity. Do not use a damaged pouch.

### Ordering information

Description	Dimensions		Material	Packaging	Cat. No.
Pouch, self-sealing	83 x 160 mm	3.3" x 6.3"	Med. grade paper/PET/CPP	200 / pk	3210.0816
Pouch, self-sealing	90 x 260 mm	3.5" x 10.2"	Med. grade paper/PET/CPP	200 / pk	3210.0926
Pouch, self-sealing	135 x 260 mm	5.3" x 10.2"	Med. grade paper/PET/CPP	200 / pk	3210.1326
Pouch, self-sealing	190 x 360 mm	7.5" x 14.2"	Med. grade paper/PET/CPP	200 / pk	3210.1936
Pouch, self-sealing	250 x 370 mm	9.8" x 14.6"	Med. grade paper/PET/CPP	200 / pk	3210.2537
Pouch, self-sealing	300 x 395 mm	11.8" x 15.6"	Med. grade paper/PET/CPP	200 / pk	3210.3040
Pouch, self-sealing	300 x 490 mm	11.8" x 19.3"	Med. grade paper/PET/CPP	200 / pk	3210.3049



See video

# Positive displacement micropipettes

## The Acura® capillar 846

**High performance positive displacement micropipettes with interchangeable glass capillary tube and ETFE tipped plunger. The soft-shaped handle and smooth plunger activation provide for enhanced hand comfort while handling viscous liquids, foaming solutions or volatile solvents. Five models cover a range from 1 to 200 µL. Three-year warranty.**

- Slim body shape, comfortable finger rest
- Smooth plunger activation
- Reliable, step-wise volume adjustment
- Colour codes matching on pipettes, plungers and capillaries
- Stainless steel, ETFE tipped plunger

### Enhanced pipetting comfort

Instrument slim shape fits any hand. Comfortable hook enables pipette to rest naturally on finger. Well engineered spring system reduces plunger force requirement.



### Pre-set volumes

Each pipette has five, easy to adjust pre-set volumes. Clear volume reading on pipette barrel.

### Colour coding

Pipette, plunger tip and glass capillary bear colour coding for easy volume identification.

### ETFE tipped plunger

Chemically inert ETFE material offers excellent resistance when coming in direct contact with liquids.

### Pipette stand 340

For up to three pipettes, any Socorex models (Cat. No. 320.340).

## 846

1 - 5 µL  
5 - 25 µL  
10 - 50 µL  
60 - 100 µL  
100 - 200 µL



## Performance and ordering information - Instruments

Volumes	Inaccuracy (E%)			Imprecision (CV%)			Cat. No.
	Min. vol.	Mid. vol.	Max. vol.	Min. vol.	Mid. vol.	Max. vol.	
1-2-3-4-5 µL	<± 3.0 %	<± 2.3 %	<± 2.0 %	< 2.5 %	< 2.0 %	< 1.2 %	846.005
5-10-15-20-25 µL	<± 1.5 %	<± 1.2 %	<± 0.8 %	< 1.0 %	< 0.9 %	< 0.6 %	846.025
10-20-30-40-50 µL	<± 1.2 %	<± 1.0 %	<± 0.7 %	< 0.8 %	< 0.7 %	< 0.4 %	846.050
60-75-80-90-100 µL	<± 0.7 %	<± 0.7 %	<± 0.7 %	< 0.6 %	< 0.5 %	< 0.3 %	846.100
100-120-150-175-200 µL	<± 0.7 %	<± 0.7 %	<± 0.7 %	< 0.3 %	< 0.3 %	< 0.3 %	846.200

Performance values obtained with bidest. water at constant temperature ( $\pm 0.5^\circ\text{C}$ ) comprised between 20 and 25°C in accordance with ISO 8655. Model 846 not autoclavable.

## Ordering information - Accessories

Colour code	Packaging	Cat. No.
<b>Spare glass capillaries</b>		
White	200 / pk	341.005
2x white	200 / pk	341.025
Green	200 / pk	341.050
Blue	200 / pk	341.100
Red	100 / pk	341.200

Colour code	Packaging	Cat. No.
<b>Spare plungers with glass capillaries</b>		
Steel	5 / pk	342.005
White	5 / pk	342.025
Green	5 / pk	342.050
Blue	5 / pk	342.100
Red	5 / pk	342.200

# Repeater pipette

## The Stepper™ 416

**Latest generation of a compact and reliable instrument intended for serial dispensing within 10 to 5000 µL. Associated with three Ecostep™ syringes only, it provides a broad choice of 53 different volumes, and up to 73 doses per filling. Stepper™ has a unique trigger action mechanism eliminating thumb fatigue. It enables a precise activation movement and is best suited for repeat dispensing, aliquoting, tubes and plate filling. Two-year warranty.**

- 4-finger activation eliminates thumb fatigue
- Setting knobs bear clear indication of volumes and number of aliquots
- Three positive displacement syringes, colour-coded
- Self-locking mechanism
- Ecostep™ syringes in regular and *bioproof™* versions



**416**

10 - 5000 µL



### Clear setting indication

After inserting disposable syringe, select appropriate volume. Markings on selector buttons allow direct reading of set volume and corresponding number of aliquots.



### Fingertip activation

User-friendly 4-finger trigger action eliminates thumb fatigue during repeat dosing.



### Aliquoting and serial distribution

Stepper™ is best suited for dividing samples in small portions or for precise dispensing in tubes and vials.

### Self-locking mechanism

Stop function prevents false delivery if remaining liquid is insufficient.



### Ordering information

Description	Packaging	Cat. No.
Stepper™ 416 (incl. 3 colour-coded selector buttons, adapter, syringe samples)	1 / pk	416.5000
Replacement adapter for red Ecostep™ syringe	5 / pk	1.411.7
Stand for one Stepper™	1 / pk	320.411



# Syringes for Stepper™

## The Ecostep™ syringes

Three syringe sizes cover full volume range from 10 to 5000 µL. Colour coding on syringe and selector button eliminates any setting error. The graduation helps monitoring syringe content. Available in standard non-sterile and sterile *bioproof™* versions. Compatible with all Stepper™ generations.

- 19 different volumes per syringe
- Up to 73 doses per filling
- Thin tip end to enter narrow tubes
- Non-sterile, bulk packaging
- Sterile, *bioproof™*, single-wrapped
- Compatible with all Stepper™ generations



**316**

10 - 100 µL  
50 - 500 µL  
500 - 5000 µL

No. of aliquots	Volume µL	Volume µL	Volume µL
73	10	50	500
49	15	75	750
36	20	100	1000
29	25	125	1250
24	30	150	1500
20	35	175	1750
18	40	200	2000
15	45	225	2250
14	50	250	2500
12	55	275	2750
11	60	300	3000
10	65	325	3250
9	70	350	3500
8	75	375	3750
8	80	400	4000
7	85	425	4250
7	90	450	4500
7	95	475	4750
6	100	500	5000

### Ecostep *bioproof™*

High purity grade syringes. Each batch of sterilized, single wrapped Ecostep™ syringes is tested by independent laboratories for sterility, and certified free of detectable DNase, RNase, human DNA and Pyrogen (endotoxin).



### Noble resin materials

Selected materials provide for excellent chemical resistance.



View chart

Parts	Materials
Syringe plunger	HD-PE
Syringe cylinder	PP Copolymer

## Performance and ordering information - Ecostep™

Volume	Performance at	Inaccuracy (E%)	Imprecision (CV%)	Syringe capacity	Sterilized & <i>bioproof™</i>	Packaging	Cat. No.
10 - 100 µL	20 µL	<± 1.5 %	< 1.5 %	0.75 mL	No	100 / pk 50x 1 / pk	316.010 316.010.9
	100 µL	<± 1.0 %	< 0.8 %		Yes		
50 - 500 µL	100 µL	<± 1.0 %	< 1.0 %	3.75 mL	No	100 / pk 50x 1 / pk	316.050 316.050.9
	500 µL	<± 0.5 %	< 0.5 %		Yes		
500 - 5000 µL	1000 µL	<± 0.8 %	< 1.2 %	37.5 mL	No	100 / pk 50x 1 / pk	316.500 316.500.9
	5000 µL	<± 0.5 %	< 0.4 %		Yes		

Performance values obtained with bidest. water at constant temperature (± 0.5°C) comprised between 20 and 25°C in accordance with ISO 8655

**Selection packs**

Ecostep™ selection packs include 20 ea. of yellow, blue and red syringes. They provide maximal flexibility at attractive costs.

**Ordering information**

Description	Packaging	Cat. No.
Ecostep™ selection pack	60 / pk	316.900
Ecostep <i>bioproof™</i> selection pack sterile, single wrapped	60x 1 / pk	316.900.9

## Manual pipette controller

### The Profiller™ manual 437

**Robust and easy to use, this model offers ergonomic shape and lightweight. It provides smooth control in both aspirating and dispensing, using glass or plastic pipettes of volume up to 100 mL. One-year warranty.**

- Large capacity bulb
- Soft action lever button
- Efficient blow-out system
- PTFE protection membrane filter
- Maintenance free

**437**

Pipettes  
up to 100 mL



#### Squeezable bulb

Simply squeeze large capacity silicone bulb for efficient aspiration. If additional aspiration is needed, it can be squeezed even during pipetting.

#### Precise control

Thumb lever button for left and right-handed users to easily control both aspiration and dispensing speeds.

#### Liquid blow-out

Press large button to expel residual liquid when using blow-out type pipettes.

#### Protection filter

Interchangeable hydrophobic membrane filter guarantees effective protection against airborne contamination during aspiration and dispensing.

#### Pipette holder

Conical shape of silicone pipette holder tightly fits graduated glass or plastic pipettes. Autoclavable.

#### Ordering information - Profiller™ manual 437

Description	Packaging	Cat. No.
Profiller™ manual 437, blue bulb	1 / pk	437100

### The Profillette™ 406

**Low cost, easy to use pipette filler suitable for graduated glass and plastic pipettes. Rotate wheel to aspirate. Fast release by pressing air inlet valve button, or gradual release by gently turning wheel.**



**406**

2 mL  
10 mL  
25 mL

- One-hand operation
- Easy filling and dispensing
- Air inlet valve for fast distribution
- Colour coding per size
- Maintenance free

#### Ordering information - Profillette™ 406

Volume	Colour	Packaging	Cat. No.
2 mL	blue	1 / pk	406.002
10 mL	green	1 / pk	406.010
25 mL	red	1 / pk	406.025
2 / 10 / 25 mL	assorted	3 / pk	406.300

#### Ordering information - Accessories

Description	Packaging	Cat. No.
<b>Profillette™ 406</b>		
Spare silicone pipette holder	1 / pk	1.406.01
Replacement nose screw	1 / pk	1.406.02
<b>Profiller™ manual 437</b>		
Membrane filter, 0.45 µm	5 / pk	322.447
Silicone pipette holder	1 / pk	1.437.01
Nose cone - white	3 / pk	1.437.02

# Electronic pipette controller

With  
Li-ion  
battery

## The Profiller™ electro 447

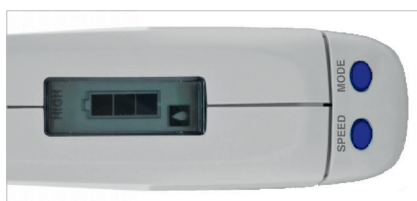
**This pipette controller fits any hand in a very comfortable way. Shape is ideal for working with glass or plastic pipettes within laminar flow or microbiological safety cabinet. A maximal working efficiency, even with large pipetting volumes, is reached through a powerful, yet quiet motor pump and the availability of several setting options. One-year warranty.**

- Powerful pump – fills 25 mL in 3 seconds
- 6 hours of autonomous work
- Comfortable finger triggers
- Large display always visible
- Real time battery charge indicator
- Li-ion battery rechargeable during use
- Reliable construction for shock and chemical resistance
- Interchangeable protection membrane filter
- Compact table and wall stands



**447**

Pipettes  
up to 100 mL and over



### Choice of dispensing modes

Instant activation of dispensing with blow-out (TC) or gravity mode (TD).

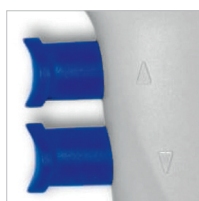
### Instant speed setting

A switch enables selection of fast or slow aspiration and dispensing speeds, clearly indicated on display.

### Ordering information

Profiller™ electro 447	Packaging	Cat. No.
With plug and charger	1 / pk	447/100

Description	Packaging	Cat. No.
Membrane filter, 0.45 µm	5 / pk	322.447
Membrane filter, 0.2 µm	5 / pk	322.407
Silicone pipette holder	1 / pk	1.447.01
Nose cone	1 / pk	1.447.02



### Finger triggers

Aspiration and dispensing controlled through two ergonomically positioned finger triggers requiring minimum activation effort. Triggers enable gradual speed regulation.



### Battery charge

Instrument plug enables charging battery either in storage position or during use. Battery level visible on display.



### Convenient stands

Instrument supplied with stable bench stand featuring three suction cups, and adhesive wall hanger.

### Supply Content

Includes a power supply with cable, four plug adapters (EU, USA/JP, GB, AUS/NZ), two spare hydrophobic filters (0.45 µm and 0.2 µm), a bench stand, wall hanger, and a Quick Guide.

Description	Packaging	Cat. No.
Spare bench stand	1 / pk	320.947
Spare wall hanger	1 / pk	320.447
Spare Li-ion battery	1 / pk	900.918

# Self-refilling microdispenser pipette

## The Acura® self-refill 865

**Hand-held microdispenser intended for repeat distribution of microliter volumes. The dispensing pipette includes a three-way valve system for automatic self-refilling. Carefully selected materials ensure durability and optimal resistance to aggressive media. Instrument combines easy handling of a regular micropipette with flexibility of a repeater pipette. Three-year warranty.**

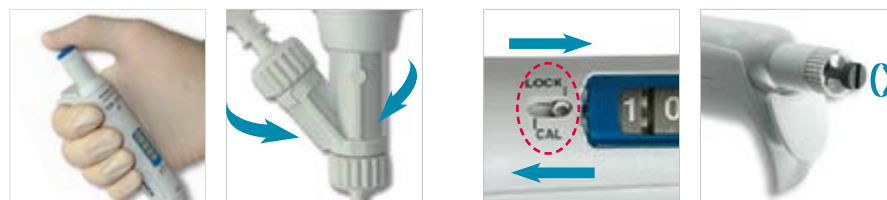
- Excellent ergonomics, soft plunger activation
- Swift-set user calibration system
- No need for consumables
- Autoclavable fully assembled at 121°C / 250°F
- Versatile feeding through bottle, tubing or syringe



**865**

5 - 50 µL  
20 - 200 µL  
100 - 1000 µL

See chemical compatibility page [41](#)



### Excellent ergonomics

Instrument shape and lightweight offer most convenient pipetting comfort. Smooth plunger activation drastically reduces hand fatigue.

### Convenient dispensing

Reliable valve system ensures high performance dispensing, dose after dose. It revolves to allow selection of the best working position.

### Performance and ordering information - Instruments

Including 90 cm silicone tubing, SS blunt end cannula, female Luer inlet valve cap, QC certificate and operating instructions.

Volume	Division	Inaccuracy (E%)			Imprecision (CV%)			Cat. No.
		Min. vol.	Mid. vol.	Max. vol.	Min. vol.	Mid. vol.	Max. vol.	
5 - 50 µL	0.1 µL	<± 5.0 %	<± 3.5 %	<± 1.5 %	< 2.0 %	< 1.4 %	< 0.4 %	865.0050
20 - 200 µL	0.2 µL	<± 2.5 %	<± 1.8 %	<± 1.0 %	< 1.5 %	< 1.0 %	< 0.3 %	865.0200
100 - 1000 µL	1.0 µL	<± 1.5 %	<± 1.1 %	<± 0.6 %	< 0.6 %	< 0.4 %	< 0.2 %	865.1000

Performance values obtained with bidest. water at constant temperature (± 0.5°C) comprised between 20 and 25°C in accordance with ISO 8655. Values altered using manifold.



**Protective calibration seal sticker**

### Swift-set calibration system

Easy and precise system with integrated key and locking mechanism, making tedious procedures a thing of the past.

### Choice of feeding sources

Supplied with 90 cm silicone tubing, the instrument also fits optional feeding sources: 1 bottle, 2 vial, 3 syringe.

### Great distribution flexibility

Outlet nozzle fits any Luer Lock needles and cannulas. Optional PTFE cannula provides enhanced chemical resistance. Use 4- or 8-channel manifold when dispensing into microplates.

### Ordering information - Accessories

Description	Packaging	Cat. No.
Reservoir*, 30 mL, PP, Luer	1 / pk	1.861.631
Reservoir*, 30 mL, PTFE, Luer	1 / pk	1.861.21T
Vial holder*, Luer	1 / pk	1.861.925
Inlet valve cap*, female Luer (for syringe)	1 / pk	1.861.720
Outlet valve cap*, Luer Lock	1 / pk	1.861.569
PTFE delivery cannula*	1 / pk	1.861.E32
Manifold*, 4-channel, Luer Lock, stainless steel (20mm spacing)	1 / pk	1.170.054
Manifold*, 8-channel, Luer Lock, stainless steel (9mm spacing)	1 / pk	1.170.058
Pipette stand 340 for 3 pipettes	1 / pk	320.340

\*Autoclavable

# Low-profile dispensers

## The Acurex™ compact 501

Compact dispensers for safe reagent handling, adapted to refrigerator storage as well as water bath heating.

Dosing mechanism entirely protected inside reservoir.

Manufactured and tested to fully comply with the latest regulations on instrument safety and precision.

Volumes range from 0.2 to 30 mL.

Two-year warranty.

- Integrated dosing mechanism
- Simple, robust construction
- Retractable graduated column reduces instrument height
- Fluid path materials excluding any metal
- Choice of four reservoir sizes
- Fully autoclavable at 121°C / 250°F

### 501

0.2 - 2 mL  
0.4 - 5 mL  
1 - 10 mL  
1 - 30 mL



### Space saving low profile

The graduated column is retractable for height reduction, making the dispenser ideal for storage in refrigerators.



### Glass reservoir

Amber glass offers optimal light protection.



### Autoclavable extension tubing

PTFE Jet-Pen™ and tubing help dispense into vessels with maximum comfort within a 60 cm distance. For 1 and 2 L reservoirs (Cat. No. 1.523).

## Performance and ordering information

Volume	Division	Imprecision (CV%)			Reservoir capacity	Cat. No.
		Min. vol.	Mid. vol.	Max. vol.		
0.2 - 2 mL	0.1 mL	< 0.5 %	< 0.35 %	< 0.1 %	250 mL	501.02025
0.2 - 2 mL	0.1 mL	< 0.5 %	< 0.35 %	< 0.1 %	1000 mL	501.021
0.2 - 2 mL	0.1 mL	< 0.5 %	< 0.35 %	< 0.1 %	2000 mL	501.022
0.4 - 5 mL	0.2 mL	< 0.5 % <sup>1</sup>	< 0.35 %	< 0.1 %	500 mL	501.0505
0.4 - 5 mL	0.2 mL	< 0.5 % <sup>1</sup>	< 0.35 %	< 0.1 %	1000 mL	501.051
0.4 - 5 mL	0.2 mL	< 0.5 % <sup>1</sup>	< 0.35 %	< 0.1 %	2000 mL	501.052
1 - 10 mL	0.2 mL	< 0.5 %	< 0.35 %	< 0.1 %	1000 mL	501.101
1 - 10 mL	0.2 mL	< 0.5 %	< 0.35 %	< 0.1 %	2000 mL	501.102
1 - 30 mL	1.0 mL	< 0.5 % <sup>2</sup>	< 0.35 %	< 0.1 %	2000 mL	501.302

Performance values obtained with bidest. water at constant temperature ( $\pm 0.5^\circ\text{C}$ ) comprised between 20 and 25°C in accordance with ISO 8655. <sup>1</sup>measured at 0.5 mL <sup>2</sup>measured at 3 mL

## Chemically inert materials

All parts in contact with the liquid are made from chemically inert materials.

Parts	Materials
Valve	Pyrex glass and synthetic ruby
Barrel	Neutral glass
Plunger	FEP-coated glass
Reservoir	Amber glass
Delivery jet and union	PTFE / ETFE / PFA



View chart

# Bottle-top dispensers

## The Calibrex™ models

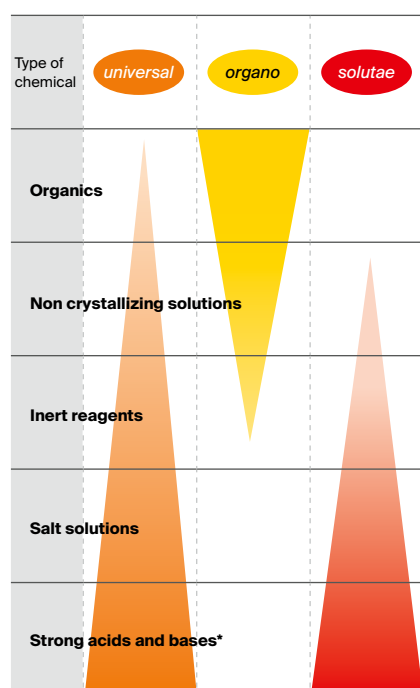
A generation of robust instruments with excellent chemical resistance, high performance, and easy maintenance. Fitting most reagent bottles, it enables safe and reproducible dispensing in volumes ranging from 0.1 to 100 mL. Choose between the *organo*, the *solutae* and the *universal* models for adequate resistance to liquid dispensed. Two-year warranty.

- Selection between three different models
- Colour coding identification
- Integrated calibration system
- Long lasting performance stability
- Easy disassembling for maintenance
- QR code accessing chemical compatibility chart
- Optional flow control stopcock for 525/530 models
- Autoclavable at 121°C / 250°F fully assembled

See chemical compatibility page [41](#)



## Model differentiation



\* Except hydrofluoric acids (HF)

## Superior material selection

Parts in contact with liquid flow are chemically inert, providing for stability and long instrument life.

Parts	520 universal	525 organo	530 solutae
Feed tubing 1 to 10 mL	PTFE	PTFE	PTFE
Feed tubing 25 to 100 mL	FEP	FEP	FEP
Valve body	Ceramic	Ceramic	Ceramic
Valve balls 1 to 10 mL	Pyrex glass	Pyrex glass	Pyrex glass
Valve balls 25 to 100 mL	Ceramic	Ceramic	Ceramic
Valve spring	Platinum-iridium	Platinum-iridium	Platinum-iridium
Valve plate	PTFE	PTFE	PTFE
Barrel	Borosilicate glass	Borosilicate glass	Borosilicate glass
Plunger 1 to 5 mL	PFA coated glass	Ceramic	PFA coated ceramic
Plunger 10 to 100 mL	PFA coated glass	Ground glass	PFA coated glass
Connecting body	ETFE	ETFE	ETFE
Delivery jet	PTFE / ETFE	FEP / PCTFE	FEP / PCTFE
Stopper	PP	ETFE	ETFE



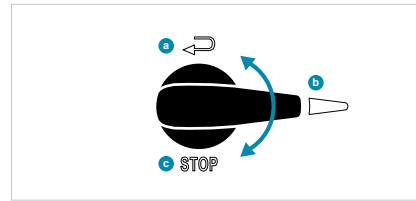
### Permanent visibility

Safety transparent thick sleeve around barrel and delivery jet window allow liquid flow monitoring.



### Volume setting

Spring loaded sliding cursor softly moves up and down dual scale and precisely stops at desired graduation. Easy exchange for the alternative classical screw button, available as accessory.



### Flow control stopcock

Next to its dispensing position **b**, device enables liquid priming and recycling **a** without reagent loss or contamination. Locking position **c** for safe dispenser transportation.



### Optimal working position

The instrument rotates 360° for adequate positioning on the bottle. Free rotating dispenser body makes volume clearly visible from any position.



### Chemical resistance

Printed QR code for instant access to chemical resistance chart.



### Air filter

Air inlet can be enlarged to receive a membrane filter, if airborne contamination is a concern.



### Easy In-lab calibration

Access to mechanism protected by safety seal sticker. Integrated key located under plunger cap. Engraved +/- arrows for easy and precise setting.



### Maintenance

Disassembling/reassembling facilitated by limited number of well-connected parts – no tool needed. Key elements such as valves, plunger, barrel and delivery jet removable in seconds for cleaning. Fully autoclavable at 121°C / 250°F.

## Bottle-top dispensers

### The Calibrex™ organo 525

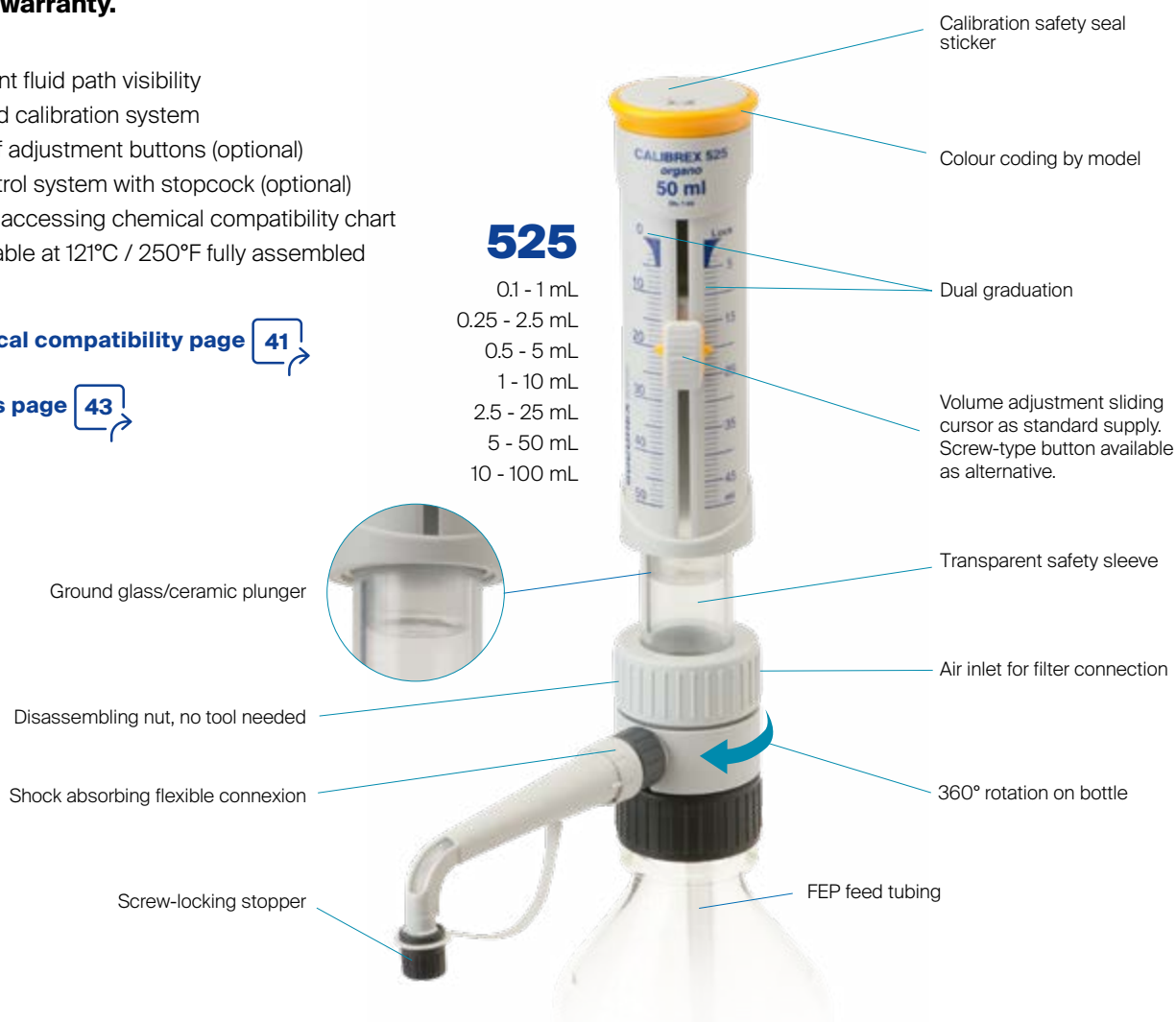
Calibrex™ organo 525 dispenser includes a ground glass or ceramic plunger, both suited for organics and non-crystallizing acid and base solutions. The material of the plunger is the main differentiating element compared to Calibrex™ solutae 530 model. The other characteristics, as well as all accessories, are common to both dispensers.

**Two-year warranty.**

- Permanent fluid path visibility
- Integrated calibration system
- Choice of adjustment buttons (optional)
- Flow control system with stopcock (optional)
- QR code accessing chemical compatibility chart
- Autoclavable at 121°C / 250°F fully assembled

See chemical compatibility page [41](#)

See bottles page [43](#)



### Supply content

Dispensers supplied with 300 mm feed tubing (350 mm ≥ 25 mL), 90 mm delivery jet (120 mm ≥ 25 mL), QC certificate and operating instructions. Base thread 45 mm, adaptors 25, 28, 32 mm (1 and 2,5 mL), 28, 32, 40 mm (5 and 10 mL), 32, 38, 40 mm (≥ 25 mL).

### Performance and ordering information - Calibrex™ organo 525

Volume	Division	Inaccuracy (E%)			Imprecision (CV%)			Cat. No. Regular (no stopcock)	Cat. No. With stopcock
		Min. vol.	Mid. vol.	Max. vol.	Min. vol.	Mid. vol.	Max. vol.		
0.1 - 1 mL	0.02 mL	<± 3.0 %	<± 1.8 %	<± 0.6 %	< 1.2 %	< 0.7 %	< 0.17 %	525.001	525.001FC
0.25 - 2.5 mL	0.05 mL	<± 2.7 %	<± 1.6 %	<± 0.6 %	< 0.9 %	< 0.55 %	< 0.17 %	525.002.5	525.002.5FC
0.5 - 5 mL	0.1 mL	<± 2.0 %	<± 1.3 %	<± 0.6 %	< 0.5 %	< 0.35 %	< 0.1 %	525.005	525.005FC
1 - 10 mL	0.2 mL	<± 1.5 %	<± 1.2 %	<± 0.6 %	< 0.5 %	< 0.35 %	< 0.1 %	525.010	525.010FC
2.5 - 25 mL	0.5 mL	<± 1.5 %	<± 1.1 %	<± 0.6 %	< 0.5 %	< 0.35 %	< 0.1 %	525.025	525.025FC
5 - 50 mL	1.0 mL	<± 1.5 %	<± 1.1 %	<± 0.6 %	< 0.5 %	< 0.35 %	< 0.1 %	525.050	525.050FC
10 - 100 mL	1.0 mL	<± 1.5 %	<± 1.1 %	<± 0.6 %	< 0.5 %	< 0.35 %	< 0.1 %	525.100	525.100FC

Performance values obtained by a smooth and steady pace movement, with bidist. water at constant temperature (± 0.5°C) comprised between 20 and 25°C in accordance with ISO 8655. Warning: omission to untighten connecting body ring before autoclaving, and / or over-tightening ring when dispensing may reduce performance.



## Bottle-top dispensers

## The Calibrex™ solutae 530

Calibrex™ solutae 530 has a glass or ceramic PFA coated plunger preventing the crystallization of chemicals. It enables trouble free distribution of salt solutions, weak and strong acids, as well as bases.

Two-year warranty.

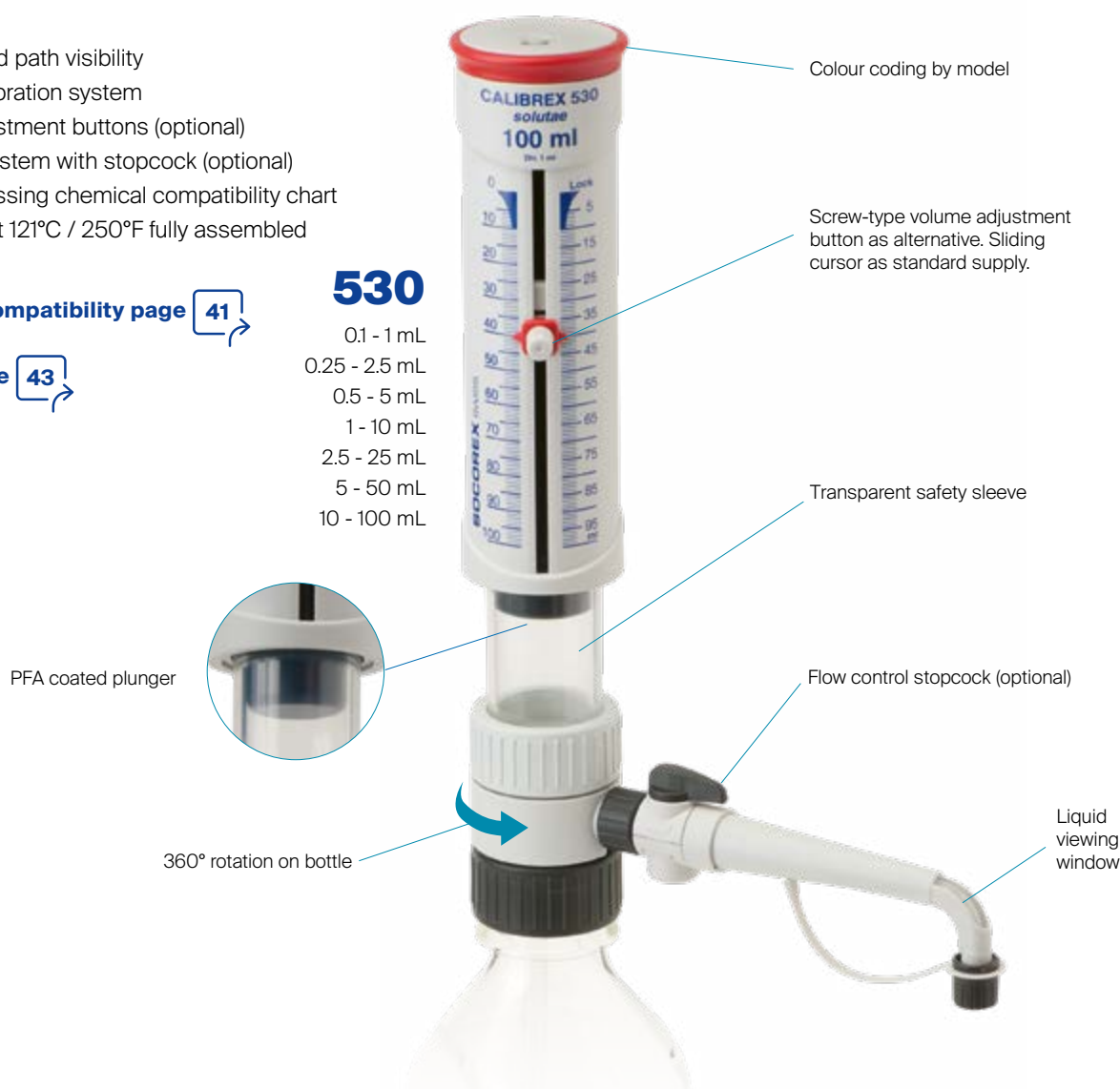
- Permanent fluid path visibility
- Integrated calibration system
- Choice of adjustment buttons (optional)
- Flow control system with stopcock (optional)
- QR code accessing chemical compatibility chart
- Autoclavable at 121°C / 250°F fully assembled

See chemical compatibility page [41](#)

See bottles page [43](#)

## 530

0.1 - 1 mL  
0.25 - 2.5 mL  
0.5 - 5 mL  
1 - 10 mL  
2.5 - 25 mL  
5 - 50 mL  
10 - 100 mL



## Supply content

Dispensers supplied with 300 mm feed tubing (350 mm  $\geq$  25 mL), 90 mm delivery jet (120 mm  $\geq$  25 mL), QC certificate and operating instructions. Base thread 45 mm, adaptors 25, 28, 32 mm (1 and 2,5 mL), 28, 32, 40 mm (5 and 10 mL), 32, 38, 40 mm ( $\geq$  25 mL).

## Performance and ordering information - Calibrex™ solutae 530

Volume	Division	Inaccuracy (E%)			Imprecision (CV%)			Cat. No. Regular (no stopcock)	Cat. No. With stopcock
		Min. vol.	Mid. vol.	Max. vol.	Min. vol.	Mid. vol.	Max. vol.		
0.1 - 1 mL	0.02 mL	$\leq \pm 3.0\%$	$\leq \pm 1.8\%$	$\leq \pm 0.6\%$	$< 1.2\%$	$< 0.7\%$	$< 0.17\%$	530.001	530.001FC
0.25 - 2.5 mL	0.05 mL	$\leq \pm 2.7\%$	$\leq \pm 1.6\%$	$\leq \pm 0.6\%$	$< 0.9\%$	$< 0.55\%$	$< 0.17\%$	530.002.5	530.002.5FC
0.5 - 5 mL	0.1 mL	$\leq \pm 2.0\%$	$\leq \pm 1.3\%$	$\leq \pm 0.6\%$	$< 0.5\%$	$< 0.35\%$	$< 0.1\%$	530.005	530.005FC
1 - 10 mL	0.2 mL	$\leq \pm 1.5\%$	$\leq \pm 1.2\%$	$\leq \pm 0.6\%$	$< 0.5\%$	$< 0.35\%$	$< 0.1\%$	530.010	530.010FC
2.5 - 25 mL	0.5 mL	$\leq \pm 1.5\%$	$\leq \pm 1.1\%$	$\leq \pm 0.6\%$	$< 0.5\%$	$< 0.35\%$	$< 0.1\%$	530.025	530.025FC
5 - 50 mL	1.0 mL	$\leq \pm 1.5\%$	$\leq \pm 1.1\%$	$\leq \pm 0.6\%$	$< 0.5\%$	$< 0.35\%$	$< 0.1\%$	530.050	530.050FC
10 - 100 mL	1.0 mL	$\leq \pm 1.5\%$	$\leq \pm 1.1\%$	$\leq \pm 0.6\%$	$< 0.5\%$	$< 0.35\%$	$< 0.1\%$	530.100	530.100FC

Performance values obtained by a smooth and steady pace movement, with bidist. water at constant temperature ( $\pm 0.5^\circ\text{C}$ ) comprised between 20 and 25°C in accordance with ISO 8655. Warning: omission to untighten connecting body ring before autoclaving, and / or over-tightening ring when dispensing may reduce performance.

## Bottle-top dispensers

### The Calibrex™ universal 520

Designed for performance handling of liquids from a large variety of bottles and flasks, the Calibrex™ universal dispensers combine the latest in dosing technology, high-tech materials and ergonomic design. They are manufactured and tested to fully comply with current safety regulations. Fixed versions also available in any volume within these ranges.

**Two-year warranty.**

- Superior chemical resistance
- Long-lasting performance stability
- Simple construction – no tool for disassembling
- Single hand volume setting
- Calibration mechanism under the cap
- QR code accessing chemical compatibility chart
- Autoclavable at 121°C / 250°F fully assembled

See bottles page  43



#### Friendly digital volume setting

Fast and precise volume adjustment. Efficient click-stop mechanism prevents unwanted alteration. Large display is easy to read; the window adjusts to desired side of instrument body. Each step on the cylindrical cam is pre-calibrated and corresponds to one division on the volume adjustment scale.



#### Optimised working position

The instrument rotates 360° for adequate positioning on top of the bottle.



#### Air filter

Air inlet can be enlarged to receive a membrane filter, if airborne contamination is a concern.



**520**

0.25 - 2 mL  
1 - 5 mL  
1 - 10 mL



#### In-lab calibration

Calibrex™ dispensers are factory calibrated and can be easily recalibrated by means of a dedicated adjustment screw.



#### Easy maintenance

Disassembling/reassembling is facilitated by the limited number of well-connected parts - no tool needed.

### Performance and ordering information

Calibrex™ universal 520 have a 32 mm base thread. They come with three adaptors: 28, 40, 45 mm and 300 mm feed tube.

Volume	Division	Inaccuracy (E %)			Imprecision (CV %)			Cat. No. Adj. volume	Cat. No. Fixed volume*
		Min. vol.	Mid. vol.	Max. vol.	Min. vol.	Mid. vol.	Max. vol.		
0.25 - 2 mL	0.05 mL	<± 3.0 %	<± 1.8 %	<± 0.6 %	< 0.5 %	< 0.35 %	< 0.1 %	520.002	520.F02
1 - 5 mL	0.1 mL	<± 2.0 %	<± 1.3 %	<± 0.6 %	< 0.5 %	< 0.35 %	< 0.1 %	520.005	520.F05
1-10 mL	0.25 mL	<± 1.5 %	<± 1.1 %	<± 0.6 %	< 0.5 %	< 0.35 %	< 0.1 %	520.010	520.F10

\* Specify desired fixed volume within instrument range when ordering. Performance values obtained with bidest. water at constant temperature (± 0.5°C) comprised between 20 and 25°C in accordance with ISO 8655.

# Microdispenser and dispenser chemical resistance chart



Chemicals A - H	Acura 865					Acurex 501					Calibrex				
	865	501	520	525	530	865	501	520	525	530	865	501	520	525	530
Acetaldehyde (Ethanal)		+	++	++	++										
Acetic acid 96%	+	+	++	++	+										
Acetic acid 100% (Glacial)	+	++	++	+	+										
Acetone (Propanone)		++	+	++	++										
Acetonitrile (MECN)	+	++	++	+	+										
Acetyl chloride		+	+	+	+										
Amino acids		+	++		++										
Ammonium chloride	+	+	++		++										
Ammonium hydroxide (amonia)		++	++	+	+										
Amyl alcohol (Pentanol)	++	++	++	++	++										
Aniline	+	++	++	++	++										
Ascorbic acid	+	++	++		++										
Benzaldehyde		++	++	++	++										
Benzene		++	+	+	+										
Boric acid 10%	+	++	++	+	++										
Bromine	+	+	+												
Butanol	+	++	++	++	++										
Butanone (MEK)		++													
Butyl acetate		++	++	+	+										
N-Butylamine		+	+	+	+										
Butyric acid	+	+	+	+	+										
Calcium chloride	+	+	++		++										
Calcium hydroxide	+	+	+		+										
Carbon disulfide	+	++	++	+	+										
Carbon tetrachloride		++	++	+	+										
Chlorine dioxide			+	+	+										
Chlorobenzene	+	++	++	+	+										
Chlorobutane	+	++	++	+	+										
Chloroethanol	+	++	++	+	+										
Chloroform			+	+	+										
Chlorosulfuric acid 100%			+	+	+										
Chromic acid 100%	+	+	+	+	+										
Citric acid	++	++	++	+	++										
Copper sulfate	+	+	++		++										
Cyclohexane	+	++	++	+	+										
Cyclohexanone		++	++	+	+										
Cyclopentane	+	+	+	+	+										
1,4-Dioxane (Diethylene dioxide)		++	++	+	+										
Dichloroacetic acid		+	++	++	++										
Dichlorobenzene	+	++	++	++	++										
Dichloroethane (DCE)	+	+	+	++	++										
Dichloromethane (DCM)	+	+	+	+	+										
Diesel oil (Heating oil)	+	++	++	++	++										
Diethylene glycol	+	++	++	++	++										
Diethylether		++	++	+	+										
Dimethyl sulfoxide (DMSO)	+	++	++	+	+										
Dimethylformamide (DMF)		++	+	+	+										
Essential oils		+	+	+	+										
Ethanol	+	++	++	++	++										
Ether		++	+	+	+										
Ethyl acetate		++	++	+	+										
Ethylenediamine		++	++	++	++										
Ethylene glycol	+	++	++	++	++										
Formaldehyde (Formalin)	++	++	++	++	++										
Formamide	+	++	++	++	++										
Formic acid		++	++	++	++										
Gamma-butyrolactone		++	++	++	++										
Gasoline		++	++	+	+										
Glycerin <40%	++	++	++	++	++										
Heptane	+	++	++	++	++										
Hexane	+	++	++	++	++										
Hydrochloric acid <20%	+	+	++	++	++										
Hydrochloric acid 37% (HCl)		+	++	+	+										
Hydrofluoric acid (HF)															
Hydrogen peroxide	+	++	++	++	+										



Chemicals I - Z	Acura 865					Acurex 501					Calibrex				
	865	501	520	525	530	865	501	520	525	530	865	501	520	525	530
Iodine	+	++	++		+										
Isooctane	+	++	++		++										
Isopropanol	++	++	++	++	++										
Isopropylamine	+	++	++	+	+										
Lactic acid		++	++		++										
2-Methoxyethanol	+	++	++	++	++										
Methanol	++	++	++	++	++										
Methyl chloride (Chloromethane)		+	+	+	+										
Methyl methacrylate (MMA)		++	++	+	+										
Methyl propyl ketone (2-Pentanone)		+	+	++	++										
Methylene chloride (Dichloromethane) (DCM)		++	+	+	+										
Nitric acid >70%		+													
Nitric acid 30-70%	+	+	+	+	+										
Nitro-hydrochloric acid (Aqua regia)		+	+	+	+										
N-methyl-2-pyrrolidone (NMP)	+	++	++	++	++										
Octane	++	++	++	++	++										
Octanol	++	++	++	++	++										
Oil, mineral (engine oil)	++	++	++	++	++										
Oil, vegetable, animal	+	++	++	+	+										
Oil of turpentine	+	++	++	+	+										
Oxalic acid	+	++	++		++										
Pentane	+	+	+	+	+										
Perchloric acid 100%	+	+	+	+	+										
Perchloric acid diluted	+	++	++	++	++										
Petroleum	+	++	++	+	+										
Petroleum ether / spirit		++	++	+	+										
Phenol	+	++	++	++	++										
Phenylhydrazine	+	++	++	+	+										
Phosphoric acid 100%	+	++	++	++	++										
Potassium chloride		+	++		++										
Potassium dichromate	+	++	++		+										
Potassium hydroxide	+	+	+		++										
Potassium iodide	+	++	++		++										
Potassium permanganate		++	++		+										
Propionic acid (Propanoic acid)	+	++	++	++	++										
Propylene glycol (Propane-1,2-diol)	++	++	++	++	++										
Picric acid (Trinitrophenol)	+	++	++	+	+										
Pyridine		+	+	+	+										
Scintillation fluid	+	++	++	++	++										
Silver nitrate		++	+		++										
Sodium acetate		++	++		++										
Sodium chloride (Kitchen salt)	+	+	++		++										
Sodium hydroxide 30%		+	++		+										
Sodium hypochlorite (Javel water)		++	++		+										
Sodium thiosulfate	+	++	++		++										
Sulfuric acid <60%	+	++	+	++	++										
Sulfuric acid >60%	+	+	+	+	+										
Terebentine oil	+	++	++	++	++										
Tetrachloroethylene	+	+	+	+	+										
Tetrahydrofuran (THF)		+	+	+	+										
Toluene		++	++	++	++										
Trichlorethylene		++	++	+	+										
Trichloroacetic acid		++	++	+	+										
Trichloroethane		+	+	+	+										
Trichloromethane (Chloroform)	+	+	+	+	+										
Triethylene glycol	+	++	++	++	++										
Trifluoroacetic acid (TFA)	+	+	+	+	+										
Urea		+	+	+	+										
Xylene		++	+	+	+										

++ Good resistance + Acceptable with limitation

## Extended chemical lists



Acura® 865



Acurex™ 501  
Calibrex™ 520



Calibrex™ 525/530

## Accessories for bottle-top dispensers



### Dispenser stability

Stands hold dispenser when screwed on small-size bottle.



### Remote aspiration

Work station facilitates liquid intake from drum or other remote container (<10 m distance, <2 m elevation).



### Extension tubing

Spiral tubing and delivery Jet-Pen™ help dispense into vessels with maximum comfort within a 600 mm distance. No tool needed to assemble or to remove for cleaning. Autoclavable.

Description	Packaging	Cat. No.
<b>Dispenser stability</b>		
Fits Calibrex™ 520 dispensers	1 / pk	320.SB050
Fits Calibrex™ 525/530 dispensers	1 / pk	320.SB100

### Remote aspiration

Fits Calibrex™ 520 dispensers*	1 / pk	320.BC050
Fits Calibrex™ 525/530 dispensers* as of 25 mL	1 / pk	320.BC100
Feed tubing set, 2.5 m with connector for remote aspiration, fits Calibrex™ 525/530 as of 25 mL	1 / pk	1.525.581

\*Dispenser and feed tubing / connector to be ordered separately

Extension tubing	Material	Length	int. Ø	Cat. No.
Fits Calibrex™ 520 up to 10 mL	PTFE	600 mm	2.2 mm	1.524
Fits Calibrex™ 525/530, up to 10 mL	FEP/PCTFE	600 mm	2.2 mm	1.525.610
Fits Calibrex™ 525/530, 25 mL	FEP/PCTFE	600 mm	2.2 mm	1.525.625
Fits Calibrex™ 525/530, 50 and 100 mL	FEP/PCTFE	600 mm	4 mm	1.525.650



### Flow control stopcock

Fitting Calibrex™ 525/530 models. No tool needed to assemble or to remove for cleaning. Autoclavable.



### Delivery jet

Standard and extended assemblies are exchangeable without any tool. Fully autoclavable.

Description	Packaging	Cat. No.
<b>Flow control stopcock for Calibrex™ 525/530</b>		
Fits models up to 10 mL	1 / pk	1.525.544
Fits models as of 25 mL	1 / pk	1.525.546
<b>Delivery jet assembly, 90 mm, for Calibrex™ 525/530</b>		
Fits 1 mL model	1 / pk	1.525.090
Fits 2.5, 5 and 10 mL models	1 / pk	1.525.091
<b>Delivery jet assembly, 120 mm, for Calibrex™ 525/530</b>		
Fits 25 mL model	1 / pk	1.525.120
Fits 50 and 100 mL models	1 / pk	1.525.121
<b>Delivery jet assembly, extended, 120 mm, for Calibrex™ 525/530</b>		
Fits 1 mL models	1 / pk	1.525.123
Fits 2.5, 5 and 10 mL models	1 / pk	1.525.125
<b>Delivery jet assembly, extended, 150 mm, for Calibrex™ 525/530</b>		
Fits 25 mL models	1 / pk	1.525.150
Fits 50 and 100 mL models	1 / pk	1.525.151

## Spare parts and bottles



### Standard and telescopic feed tubings

Supplied either cut to standard size or uncut, by the meter.

Optional telescopic tubing for instant fitting to bottle size.

Description	Length	int. Ø	Cat. No.
-------------	--------	--------	----------

#### Replacement feed tubing, PTFE

Fits Calibrex™ 520/525/530 up to 10 mL, cut	300 mm	5 mm	511.707
Fits Calibrex™ 520/525/530 up to 10 mL, by the meter, uncut	specify	5 mm	511.709

#### Replacement feed tubing, FEP

For Calibrex™ 525/530 as of 25 mL, cut	350 mm	7 mm	525.350
For Calibrex™ 525/530 as of 25 mL, by the meter, uncut	specify	7 mm	525.706

#### Telescopic feed tubing, FEP

Fits Calibrex™ 520/525/530 up to 10 mL	150 - 255 mm	1 / pk	1.525.352
Fits Calibrex™ 525/530 as of 25 mL	195 - 345 mm	1 / pk	1.525.355



### Alternative setting button

Classical screw-type button easily replaces the original sliding cursor, according to user preference.

### Calibration seal stickers

Autoclavable seal sticker protects access to the calibration mechanism of Calibrex™ 525/530 models.

Description	Colour	Packaging	Cat. No.
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#### Screw type volume setting button

Fits Calibrex™ 525 dispensers	Yellow	1 / pk	1.525.918
Fits Calibrex™ 530 dispensers	Red	1 / pk	1.530.918

#### Safety seal sticker

Fits Calibrex™ 525/530 dispensers		25 / pk	1.525.525
Fits Calibrex™ 525/530 dispensers		100 / pk	1.525.526



### Bottle-neck adapters

Each Calibrex™ dispenser comes along with three bottle-neck adapters. To fit additional bottle-neck diameter, order the appropriate adapter size or combine two adapters to reach the adequate solution.

Type	Ext. Ø of bottle neck	Cat. No.
------	-----------------------	----------

#### Adapters for Calibrex™ organo 525 and solutae 530

Threaded, PP	32 - 25 mm	1.525.GL25
Threaded, PP	32 - 28 mm	1.525.GL28
Threaded, PP	45 - 32 mm	1.525.GL32
Threaded, PP	45 - 38 mm	1.525.GL38
Threaded, PP	45 - 40 mm	1.525.GL40

#### Adapters for Calibrex™ universal 520

Threaded, PP	Ø 22, 25, 28, 30, 34, 36, 38, 40, 45 mm	GLP + Ø
Threaded, PTFE	Ø 36, 38, 40, 45 mm	GLT + Ø



### Reagent bottles

Glass and polyethylene reagent bottles supplied with its PP screw cap. Suitable for all bottle top dispensers.

Corresponding neck adapters supplied with the dispensers.

Shape	Volume	Neck, ext. Ø	Cat. No.
-------	--------	--------------	----------

#### Amber glass<sup>1</sup>

Square	100 mL	32 mm	314.0100
Square	250 mL	32 mm	314.0250
Square	500 mL	32 mm	314.0500
Square	1000 mL	45 mm	314.1000
Round	2500 mL	45 mm	314.2500

#### Amber glass<sup>2</sup>, with handle

Round	2500 mL	45 mm	314.2500H
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#### PE coated amber glass<sup>2</sup>

Square	500 mL	32 mm	314.0500PE
Square	1000 mL	45 mm	314.1000PE
Round	2500 mL	45 mm	314.2500PE

Shape	Volume	Neck, ext. Ø	Cat. No.
-------	--------	--------------	----------

#### Clear borosilicate glass<sup>1</sup>

Round	250 mL	45 mm	314.0250C
Round	500 mL	45 mm	314.0500C
Round	1000 mL	45 mm	314.1000C
Round	2000 mL	45 mm	314.2000C

#### Polyethylene<sup>2</sup>

Square	250 mL	25 mm	315.0250
Square	500 mL	25 mm	315.0500
Square	1000 mL	32 mm	315.1000
Square	2500 mL	45 mm	315.2500

<sup>1</sup> autoclavable <sup>2</sup> not autoclavable



# Laboratory syringes

## The Dosys™ syringes

From the basic unit to the corrosion resistant model, the laboratory dedicated syringe line offers precision instruments you can trust. Like a hand-activated pump, with liquid inlet and outlet, the selection of pistol grip and two ring instruments are intended for safe and reliable liquid distribution in a wide volume range.

One-year warranty.

- Optimal hand balance and ergonomics
- Fast and reliable volume setting
- Excellent reproducibility
- Plunger tightness without O-ring
- High chemical resistance
- Fully autoclavable at 121°C / 250°F

162  
163  
164

Two-ring handle

172  
173  
174

Pistol-grip handle



### Simple, natural movements

Both pistol-grip and two-ring handles fit any hand in a comfortable way. Activation performed with limited effort for efficient work even during long dispensing series.

### Syringe stand

Stand holds syringe in ready-to-fetch position. Easy-to-clean polyamid material. Autoclavable (Cat. No. 320.170).



### 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 high-precision stainless steel plunger and ground glass barrel. No O-ring to mess with or replace.

### Glass protection

Interchangeable glass barrel is protected by a PVC sleeve (not autoclavable) to prevent breakage.

### Few parts assembly - Low maintenance

The automatic syringes are made of only six main parts, easy to disassemble. Fast access to all elements allows rapid and efficient cleaning. Spares are available at reasonable costs.

# Laboratory syringes



## Dosys™ basic syringes 162 / 172



- Fill-by-fill (automatic) through needle or cannula
- Supplied without valve system
- Luer Lock nozzle

Package includes syringe, PVC protection sleeve and operating instructions.

## Dosys™ classic syringes 163 / 173



- Self-refilling automatic
- Integrated valve system
- Luer Lock nozzle

Package includes syringe, 1-meter long silicone feed tube, sinker, PVC protection sleeve, aspiration and vent cannulas, set of spares for valve, operating instructions.

## Dosys™ premium syringes 164 / 174



- Self-refilling automatic
- Detachable valve system
- Enhanced corrosion resistance
- Luer Lock nozzle

Package includes syringe, 1-meter long silicone feed tube, sinker, PVC protection sleeve, aspiration, vent and dosing cannulas, set of spares for valve, operating instructions.

### Ordering information



Volume	Division	Dosys 162 Cat. No.	Dosys 172 Cat. No.
0.1 - 1 mL	0.05 mL	162.0501	172.0501
0.3 - 2 mL	0.1 mL	162.0502	172.0502
0.5 - 5 mL	0.5 mL	162.0505	172.0505
1 - 10 mL	1.0 mL	162.0510	172.0510

### Ordering information



Volume	Division	Dosys 163 Cat. No.	Dosys 173 Cat. No.
0.025 - 0.3 mL	0.025 mL	163.05003	173.05003
0.1 - 0.5 mL	0.1 mL	163.05005	173.05005
0.1 - 1 mL	0.05 mL	163.0501	173.0501
0.3 - 2 mL	0.1 mL	163.0502	173.0502
0.5 - 5 mL	0.5 mL	163.0505	173.0505
1 - 10 mL	1.0 mL	163.0510	173.0510
5 - 20 mL	1.0 mL		173.0520

### Ordering information



Volume	Division	Dosys 164 Cat. No.	Dosys 174 Cat. No.
0.1 - 1 mL	0.05 mL	164.0501	174.0501
0.3 - 2 mL	0.1 mL	164.0502	174.0502
0.5 - 5 mL	0.5 mL	164.0505	174.0505
1 - 10 mL	1.0 mL	164.0510	174.0510

### Performance all models

Volume	Imprecision (CV%)		
	Min. vol.	Mid. vol.	Max. vol.
0.025 - 0.3 mL	< 1.8 % <sup>1</sup>	< 1.2 %	< 0.5 %
0.1 - 0.5 mL	< 1.2 %	< 0.9 %	< 0.4 %
0.1 - 1 mL	< 0.7 %	< 0.6 %	< 0.4 %
0.3 - 2 mL	< 0.6 %	< 0.5 %	< 0.4 %
0.5 - 5 mL	< 0.5 %	< 0.4 %	< 0.2 %
1 - 10 mL	< 0.5 %	< 0.4 %	< 0.2 %
5 - 20 mL	< 0.5 %	< 0.4 %	< 0.4 %

Tests performed with bidest. water, using stainless steel cannula (1.2 x 50 mm), at constant working speed. <sup>1</sup> Measured at 0.075 mL

### Liquid path materials (for chemical resistance)

Parts	basic / classic models	premium models
Feed tubing	Silicone	Silicone
Barrel	Glass AR-Glas®	Glass AR-Glas®
Washer, barrel	FPM	FPM
Plunger	Stainless steel DIN 430F	Stainless steel DIN 316L
Valve system	Ni-Cr Brass	Stainless steel DIN 304
Washer, valve	PTFE	PTFE
Spring and balls, valve	Stainless steel, DIN 304	Stainless steel, DIN 304
Sinker, feed cannula	Ni-Cr Brass	Ni-Cr Brass



## Dosys™ laboratory syringes - Unlimited applications



### Dose-by-dose distribution

The 162 and 172 syringe models without valve system (or 164 / 174 models after removing the detachable valve assembly) enable liquid sampling. Both spring-assisted aspiration and distribution occur through the cannula. Choosing different cannula sizes allows samples to be taken from deep containers.



### Repeat dispensing

Spring-loaded plunger and three-way valve system allow for trouble free distribution of a large variety of liquids in various containers. Spring loaded plunger rod enables liquid aspiration and distribution. The use of optional manifold changes the syringe into a 4 or 8-channel device to fill microplates.



### Sterile work

Syringes and accessories are autoclavable fully assembled (121°C). This is particularly adapted for sterile distribution such as hot agar in Petri dishes. Precise dosing of culture media and supplements in tissue culture flasks is another easy task for the Dosys syringes.



### Filter fits Luer Lock nozzle

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



### Aspiration with reverse modus valve

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 for trouble free work.



### Laboratory animal feeding or injection

The Dosys syringes are also suitable for safe and stress free feeding or injections of laboratory animals. Select a suitable needle and drenching cannula listed in the accessory section.

## Accessories for self-refilling syringes



### Alternative feed sources

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

Description	Packaging	Cat. No.
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 only (Cat. No. 187613), to be ordered separately.



### Enhanced tightness set

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

Description	Packaging	Cat. No.
Set includes one each plunger, X-ring, 5 mL barrel and grease	1 / pk	1.170.205
Spare barrel for tightness set, 5 mL	6 / pk	0187.05T
Set includes one each plunger, X-ring, 10 mL barrel and grease	1 / pk	1.170.210
Spare barrel for tightness set, 10 mL	6 / pk	0187.10T



### Aspiration valve

Reverse modus valve set for liquid aspiration (ex. waste collection in separate container). Vented waste collector cap and enhanced tightness set recommended.

Description	Packaging	Cat. No.
Reverse modus aspiration valve unit for 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



### Multiple dispensing manifolds

For convenient distribution in 24- and 96-well plates. Tight-fitting Luer and Luer Lock syringe nozzles. Stainless steel with PTFE stoppers, autoclavable.

Description	Packaging	Cat. No.
4-channel manifold, 20 mm spacing	1 / pk	1.170.054
8-channel manifold, 9 mm spacing	1 / pk	1.170.058



### Dispensing cannulas & needles

Luer Lock, stainless steel, autoclavable. Needles supplied 12 / pack.

Size (ø x L)	Packaging	Cat. No.
<b>Lab cannulas, blunt end</b>		
0.8 x 40 mm	12 / pk	370.0840
1.2 x 50 mm	1 / pk	370.1250
2.2 x 100 mm	1 / pk	370.22100
2.2 x 150 mm	1 / pk	370.22150
<b>Superior quality needles, beveled</b>		
1.2 x 10 mm	1 / pk	371.1210UN
1.6 x 20 mm	1 / pk	371.1620UN
2.0 x 30 mm	1 / pk	371.2030UN
2.0 x 40 mm	1 / pk	371.2040UN



### Drenching cannulas

For safe animal mouth and nose feeding. Stainless steel, autoclavable.

Size (ø x L)	Packaging	Cat. No.
<b>Drenching cannulas, straight</b>		
0.9 x 25 mm	3 / pk	376.0925S
1.2 x 51 mm	3 / pk	376.1251S
1.6 x 102 mm	2 / pk	376.16102S
3.0 x 203 mm	2 / pk	376.30203S
<b>Drenching cannulas, bent</b>		
0.9 x 25 mm	3 / pk	376.0925B
1.2 x 51 mm	3 / pk	376.1251B
1.6 x 102 mm	2 / pk	376.16102B
3.0 x 203 mm	2 / pk	376.30203B

### Injection needles, beveled

ø x L, mm	Cat. No.	ø x L, mm	Cat. No.	ø x L, mm	Cat. No.	ø x L, mm	Cat. No.
0.7 x 13	371.0713	1.4 x 10	371.1410	1.0 x 20	371.1020	1.6 x 100	371.16100
0.8 x 10	371.0810	1.4 x 20	371.1420	1.0 x 30	371.1030	1.8 x 10	371.1810
0.8 x 25	371.0825	1.6 x 13	371.1613	1.0 x 40	371.1040	1.8 x 20	371.1820
0.8 x 30	371.0830	1.6 x 20	371.1620	1.2 x 10	371.1210	2.0 x 30	371.2030
0.8 x 40	371.0840	1.6 x 25	371.1625	1.2 x 20	371.1220	2.0 x 40	371.2040
1.0 x 10	371.1010	1.6 x 30	371.1630	1.2 x 50	371.1250	2.0 x 50	371.2050

Additional sizes available

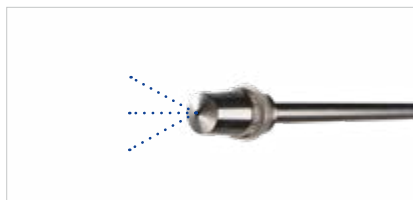
## Accessories and spare parts



### Anti-blocking factor (ABF™)

Premium non-oily, non-sticky, non-toxic, silicone-free lubricant. It reduces instrument wear and provides efficient metal protection.

Description	Packaging	Cat. No.
Lubricant spray 70 mL	1 / pk	1.170.705
	6 / pk	1.170.906
	12 / pk	1.170.912
Lubricant spray refill bottle, 500 mL	1 / pk	1.170.755
	6 / pk	1.170.956
	12 / pk	1.170.962



### Cannula with sprayer nozzle

Usable in versatile applications where spraying and nebulizing liquids are required. Available in short (180 mm) and long (500 mm) sizes. Made of chrome plated brass, Luer Lock, autoclavable.

Size Ø x L, mm	Packaging	Cat. No.
3.0 x 180 mm	1 / pk	370.30180
3.0 x 500 mm	1 / pk	370.30500



### Cleaning brushes

Heavy duty nylon brushes with tufted end and plastic handle for barrel cleaning.

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 6 nylon brushes, 2 each	6 / pk	1.170.300

## Spare parts for self-refilling syringes



### Ground glass barrels

Description	Packaging	Cat. No.
Barrel, syringe 0.3 mL	6 / pk	0187.003
Barrel, syringe 0.5 mL	6 / pk	0187.005
Barrel, syringe 1 mL	6 / pk	0187.01
Barrel, syringe 2 mL	6 / pk	0187.02
Barrel, syringe 5 mL	6 / pk	0187.05
Barrel, syringe 10 mL	6 / pk	0187.10
Barrel, syringe 20 mL	3 / pk	0187.20



### Spare bags

Description	Packaging	Cat. No.
Kit for valve, syringe 0.3 mL	1 bag	1.187.72003
Kit for valve, syringe 0.5 mL	1 bag	1.187.72005
Kit for valve, syringe 1 mL	1 bag	1.187.7201
Kit for valve, syringe 2 mL	1 bag	1.187.7202
Kit for valve, syringe 5 mL	1 bag	1.187.7205
Kit for valve, syringe 10 mL	1 bag	1.187.7210
Kit for valve, syringe 20 mL	1 bag	1.187.7220

Includes springs, balls, cleaning rod, washers for valve and barrel washer.



### Vent and feed cannulas

Description	Packaging	Cat. No.
<b>Short vent cannulas</b>		
Plastic / SS, syringes 0.3 to 5 mL	1 / pk	187.933
Chrome plated, syringe 10 mL	1 / pk	187.591
Chrome plated, syringe 20 mL	1 / pk	187.593

### Long feed cannulas

Chrome plated, syringes 0.3 to 10 mL	1 / pk	187.592
Chrome plated, syringe 20 mL	1 / pk	187.594

### PVC protection sleeves

Description	Packaging	Cat. No.
Sleeve, 0.3, 0.5 mL barrels	6 / pk	1.170.4005
Sleeve, 1 mL barrels	6 / pk	1.170.401
Sleeve, 2 mL barrels	6 / pk	1.170.402
Sleeve, 5 mL barrels	6 / pk	1.170.405
Sleeve, 10 mL barrels	6 / pk	1.170.410
Sleeve, 20 mL barrels	3 / pk	1.170.420

### Feed tubing (medical quality silicone)

Description	Packaging	Cat. No.
Tube, syringes 0.3 to 10 mL, cut	1 m / pk	187.705
Tube, syringes 0.3 to 10 mL, cut	3x 1 m / pk	187.905
Tube, syringes 0.3 to 10 mL, cut	10 m / pk	187.910
Tube, syringes 0.3 to 10 mL, uncut	by the meter	187.710
Tube, syringe 20 mL, cut	1 m / pk	187.707

### Other spare parts

Refer to separate list for exhaustive selection.



# All-glass syringes

## The Dosys™ all-glass syringes

The reusable borosilicate glass syringes offer superior chemical and heat shock resistance. A precious, low-cost alternative to disposable plastic syringes in any applications involving liquids. Also suited for handling various oils, petroleum derivatives, glues, dyes, perfumes, essential oils and organic chemicals (except HF acid).

- Precision-machined plunger and barrel
- Interchangeable parts
- Excellent fitting and liquid tightness (not gas tight)
- Permanent, high visibility graduations
- Instant disassembling and cleaning
- Autoclavable at 121°C / 250°F

See cannulas and needles page [48](#)



**155**

1 to 250 mL



### Nozzle types

Two versions available with either glass Luer or metal Luer Lock nozzle.



### Interchangeable parts

Barrel and plunger are precision machined and fully interchangeable.



### Convenient packaging

Blister-style transparent rigid packaging offers optimal protection.

### Dissolved gas analysis

Large volume models perform excellently in dissolved gas analysis (DGA) of mineral oil in cooling system of power plant transformers.

## Ordering information

Volume	Division	Packaging	Glass Luer nozzle Cat. No.	Metal Luer Lock nozzle Cat. No.
0.1 - 1 mL	0.05 mL	3 / pk	155.0301	155.0501
0.5 - 2 mL	0.1 mL	3 / pk		155.0502
0.2 - 5 mL	0.2 mL	3 / pk	155.0305	155.0505
1 - 10 mL	0.2 mL	3 / pk	155.0310	155.0510
1 - 20 mL	1 mL	2 / pk	155.0320	155.0520
1 - 30 mL	2 mL	2 / pk	155.0330	155.0530
1 - 50 mL	2 mL	1 / pk		155.0550
10 - 100 mL	10 mL	1 / pk	155.03100	155.05100
10 - 150 mL	10 mL	1 / pk		155.05150
10 - 200 mL	10 mL	1 / pk		155.05200
10 - 250 mL	10 mL	1 / pk		155.05250

**Based on a long experience in manufacturing precision liquid handling instruments, Socorex Service Center provides fast and reliable services for all brand micropipettes and dispensers in its ultra-modern facilities. The Socorex instruments are built to last. In order to guarantee trouble-free usage over time, a minimum maintenance and regular calibration are strongly recommended.**

- All brand service for pipettes and dispensers
- Know-how and high competence
- Broad service programme
- Reference measurement procedure: ISO 8655
- SAS accredited calibration laboratory according to ISO 17025



## Socorex master classes

Contact Socorex experts for face-to-face or remote master classes on various topics such as the proper use or calibration of micropipettes.

### SCS accredited laboratory

Accredited by SAS (Swiss Accreditation Services), the Socorex control laboratory performs calibrations in full compliance with ISO 17025 and delivers certificates recognized internationally by ILAC members.



### Know-how and high competence

Socorex Service Team is highly acquainted with all metrology aspects of maintenance and calibration. The qualified personnel has a broad product knowledge and remains available for all technical matters. The team also provides professional trainings and solutions tailored to your needs.

### Efficient handling

The lead time for instruments received at Socorex is five to seven working days, or 48 hours using our "Express service".

### Standards and Certifications

Our Service Center is operating under full respect of all current standards and regulations. Permanent supervision maintains high quality level and conformity to existing certifications.

### For all instrument brands

The complete range of services apply to any models / any brands available on the market. Calibration is performed under respect of manufacturer's tolerance values.

## Standards and control levels



### ISO 8655 certificate

Metrologic controls based on the ISO 8655 standard. Socorex applies manufacturer performance values for all instruments, which are narrower than those recommended in the ISO standard.

### ISO 17025 - accredited certificate

When performing metrological controls under ISO 17025 standard, measurements take into consideration uncertainties at all levels of the calibration process. As a result, user obtains real performance values within the published uncertainties determined for our laboratory. The accredited certificate is a must for laboratories dealing with ISO 17025 procedures or when mastering uncertainties is required.



## A choice of service level

ISO 8655

ISO 17025 (SCS)

### CHECK-UP

Control, 3x 5 measurements, with detailed QC certificate before maintenance ("as found").

**Adequate for rapid instrument evaluation.**

### STANDARD SERVICE

Repair, maintenance, control and calibration, 2x 4 measurements, with QC certificate.

**The cost effective solution for any liquid handling instrument.**

### Three service levels also available with SCS accredited certificates

### CLASSIC SERVICE

Cleaning and maintenance, control and calibration, 2x 10 measurements, with detailed QC certificate.

**Recommended as routine check.**

### CLASSIC SCS SERVICE

Same as beside with ISO 17025 calibration and SCS accredited certificate.

**Alternative routine check when dealing with ISO 17025 procedures, or when mastering uncertainties is required.**

### PREMIUM SERVICE

Cleaning and maintenance, control and calibration, 3x 10 measurements, with detailed QC certificate.

**An in-depth check, also including mid-range measurements.**

### PREMIUM SCS SERVICE

Same as beside with ISO 17025 calibration and SCS accredited certificate.

**A must for laboratories dealing with ISO 17025 procedures, or when mastering uncertainties is required. Available for new instruments as well.**

### ADVANCED SERVICE

Control, 2x 10 measurements, with detailed certificate before maintenance ("as found"). Then cleaning, maintenance and calibration, 2x 10 measurements, with detailed QC certificate.

**Perfect for instruments used in GLP environment or for validation of critical analytical results.**

### ULTRA SERVICE

Control, 3x 10 measurements, with detailed certificate before maintenance ("as found"). Then cleaning, maintenance and calibration, 3x 10 measurements, with detailed QC certificate.

**Ultimate service for GLP environment when analytical results are demanded.**

### ULTRA SCS SERVICE

Same as beside with ISO 17025 calibration (mastering uncertainties) and SCS accredited certificate.

**Ultimate service when dealing with ISO 17025 for GLP environment demanding analytical results.**



## ISO 8655 service programme

ISO 8655 standard provides the guidelines for the correct use and calibration of a plunger operated volumetric instrument. It describes the pipetting techniques and the parameters that must be observed for calibration (number of measurements, ambient temperature, humidity). This standard corresponds to a regular service level. The instruments are cleaned, repaired, and recalibrated within their manufacturer tolerances. This guarantees proper function until the next service and calibration.

## Operations included for each service level

PROCEDURES		SERVICE LEVELS					
		Maintenance and control per ISO 8655					
		Check-up	Standard	Classic	Premium	Advanced	Ultra
Instrument registration		•	•	•	•	•	•
Gravimetric test before maintenance ("as found")	Min. Vol.	5 x				10 x	10 x
	Mid. Vol.	5 x <sup>3</sup>					10 x <sup>3</sup>
	Max. Vol.	5 x				10 x	10 x
Decontamination <sup>1</sup> , disinfection, disassembling, cleaning			•	•	•	•	•
Instrument check-up		•	•	•	•	•	•
X-ring replacement as needed			•	•	•	•	•
Other faulty parts replacement as needed			•	•	•	•	•
Function and tightness check		•	•	•	•	•	•
Gravimetric test after maintenance per ISO 8655	Min. Vol.		4 x <sup>2</sup>	10 x	10 x	10 x	10 x
	Mid. Vol.		-	-	10 x <sup>3</sup>	-	10 x <sup>3</sup>
	Max. Vol.		4 x <sup>2</sup>	10 x	10 x	10 x	10 x
Final check and visa		•	•	•	•	•	•
QC certificate before maintenance ("as found")		•					•
QC certificate after calibration ("as left")			•	•	•	•	•

<sup>1</sup> On request

<sup>2</sup> Five measurements, multichannel below 50µL

<sup>3</sup> When applicable

## ISO 17025 accredited service programme

The ISO 17025 standard goes deeper into the matter. It also considers the measurement uncertainties when calibrating an instrument and the effects of external factors (balance, thermometer, hygrometer, environment). This level of service is required by all accredited laboratories. The ISO 17025 calibration certificate is one of the documents of the laboratory, certified by an independent metrological organism and may be requested for verification during a quality audit.

## Operations included for each service level

PROCEDURES		SERVICE LEVELS			
		Accredited calibration per ISO 17025			
		Classic SCS	Premium SCS	Ultra SCS	New instruments
Instrument registration		•	•	•	
Gravimetric test before maintenance ("as found")	Min. Vol.			10 x	
	Mid. Vol.			10 x <sup>3</sup>	
	Max. Vol.			10 x	
Decontamination <sup>1</sup> , disinfection, disassembling, cleaning		•	•	•	
Instrument check-up		•	•	•	
X-ring replacement as needed		•	•	•	
Other faulty parts replacement as needed		•	•	•	
Function and tightness check		•	•	•	
Gravimetric test after maintenance per ISO 17025	Min. Vol.	10 x	10 x	10 x	10 x
	Mid. Vol.	-	10 x <sup>3</sup>	10 x <sup>3</sup>	10 x
	Max. Vol.	10 x	10 x	10 x	10 x
Final check and visa		•	•	•	•
QC certificate before maintenance ("as found")				•	
QC certificate after calibration ("as left")		•	•	•	•
Accredited calibration certificate per ISO 17025		•	•	•	•

<sup>1</sup> On request

<sup>2</sup> Five measurements, multichannel below 50µL

<sup>3</sup> When applicable

### New instruments

Also supplied on request with accredited certificates. To be specified when ordering.

## Patents and brands

Socorex Instruments	US Patents
Acura <sup>®</sup> <i>manual</i> models 826XS.0200, 826XS.1000	8,900,526 B2
Acura <sup>®</sup> <i>electro</i> models 926XS.0200, 926XS.1000	8,900,526 B2
Calibrex <sup>™</sup> models 525, 530	9,884,334 B2

## Brand and trade names

Brands	Trade names	
Socorex <sup>®</sup>	ABF <sup>™</sup>	Ecostep <sup>™</sup>
Isba <sup>®</sup>	Acurex <sup>™</sup>	Jet-Pen <sup>™</sup>
Acura <sup>®</sup>	<i>bioproof</i> <sup>™</sup>	Justip <sup>™</sup>
Calibra <sup>®</sup>	Calibrex <sup>™</sup>	Profiller <sup>™</sup>
Qualitix <sup>®</sup>	Dosys <sup>™</sup>	Stepper <sup>™</sup>

### Important information

Refer to package inserts for safety precautions, operating instructions and warranty terms.

User must pay special attention to possible hand fatigue during serial pipetting and its medical consequences such as repetitive strain injuries (RSI).

Mind risks involved in handling hazardous liquids with respect to personal, third party and environmental protection and safety.

Products and specifications are subject to change without prior notice.





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