

Automatic self-refilling light syringe

The Socorex® *ultra* 1810 syringe

- Instrument features
- Syringe comparison
- Areas of application
- Vial and tube feeding models
- Accessories and parts

Automatic self-refilling light syringe

The *ultra 1810* syringe line delivers highly precise doses, setting new standards in micro volumes injections. Reusable, extremely robust, yet light in weight, the instrument's capacity stretches from 0.02 mL to 2 mL. Intended for applications among various animal species such as (but not limited to) fish, pigeons, rabbits, chicks, ducks, poultry, geese and piglets.

- Superior, long-lasting quality
- Natural ergonomics
- Suitable for all vaccines and medications
- Longevity matching environmental considerations
- High flexibility in use
- Autoclavable fully assembled at 121 °C / 250 °F



Superior material selection for ultimate durability

| Part | Material |
|---------------------------------------------|-----------------------------------------------------------------------------|
| Feed tubing | Medical grade silicone |
| Barrel | Soda-lime glass (0.5, 1, 2 mL) Borosilicate glass 3.3 (0.1, 0.2, 0.3 mL) |
| Plunger | Stainless steel |
| Barrel washer | FPM* |
| Plunger O-ring (0.1, 0.2 and 0.3 mL models) | FPM* |
| Valve cartridge | PP, stainless steel and FPM* |
| Syringe casing | PA with glass fiber |
| Sinker and feed cannula | Nickel-chrome plated brass |

*FPM used in Socorex products is FDA compliant

Environment and sustainability

Robustness and longevity of the Socorex instruments are clear contributions to environmental considerations. Instruments can be disassembled and reassembled multiple times and worn parts easily replaced. Supplied in special reusable packaging to always keep the instrument safe.

Natural ergonomics

Shorter axis and revised handle design makes the syringe fit in hand in the most comfortable way. Activation can be performed with minimal effort, guaranteeing high productivity output.



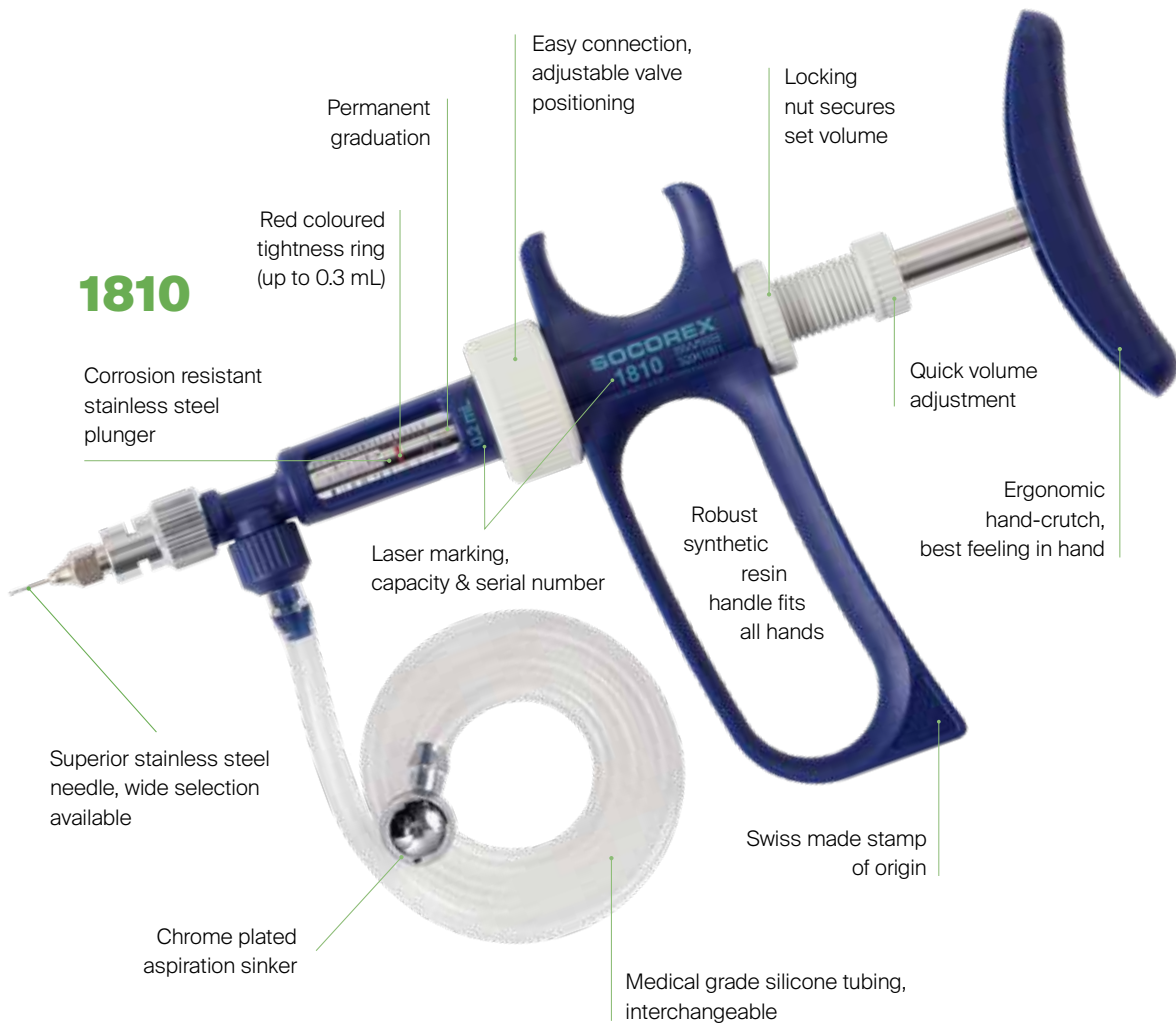
Easy and flexible in use

Volume can easily be set with the micrometric screw and secured with a locking nut to assure high dose-to-dose reproducibility even with small volumes. Vial and tube feeding accessories are interchangeable on the syringe.



Access to quick guide
ultra 1810

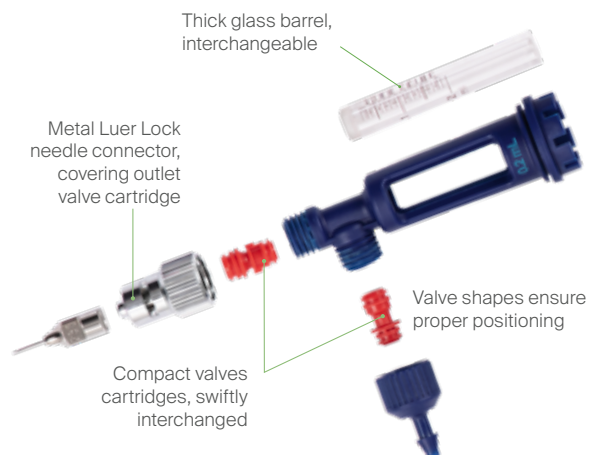
Instrument features



Disassembling & maintenance

The syringe is easy to disassemble / reassemble. Fast access to all elements allows quick and efficient cleaning.

Watch the video on syringe cleaning



Syringe comparison

Unmatched
Robustness



ultra 1810

classic 167/187/287

| | | |
|---------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Syringe handle | PA enriched with glass fibers | |
| Plunger | Stainless steel | |
| Plunger tightness | No O-ring (except <i>ultra 1810</i> ≤ 0.3 mL) | |
| Nozzle | Metal Luer Lock | |
| Disassembly | Easy access to all parts for maintenance, no tools needed | |
| Spare parts | All parts available separately | |
| Sterilization | Disassembled in boiling water or assembled in autoclave (121 °C / 250 °F) | |
| Specific accessories | Conversion sets vial and tube feeding, FishGuide™ | |
| | Abacus™ shot counter | Manifold for Twin syringe |
| Weight* | 91 g | 155 g |
| Activation force* | ~14 N | ~20 N |
| Handle distance at rest* | 55 mm | 70 mm |
| Syringe body | PA enriched with glass fiber | Nickel-chrome plated brass |
| Syringe barrel | Thick ground glass | Ground glass |
| Models | Tube and vial feeding | Tube and vial feeding, single or Twin |
| Volume ranges | 0.02 - 0.1 mL / 0.05 - 0.2 mL / 0.05 - 0.3 mL 0.1 - 0.5 mL / 0.1 - 1 mL / 0.3 - 2 mL | 0.025 - 0.3 mL / 0.1 - 0.5 mL / 0.1 - 1 mL / 0.3 - 2 mL 0.5 - 5 mL / 1 - 10 mL |
| Fixed volume | N/A | 0.2, 0.3, 0.5 and 1 mL |
| Valve system | Compact valve cartridges | Metal valve springs and balls |













Criteria for a wise choice

- Almost unbreakable glass barrel
- Best suited for small volume injections
- Ergonomic design of hand piece
- Short, lightweight and extra-smooth activation

- Best seller for more than 30 years
- Larger volumes for a wide range of animals
- Parts fitting several instrument generations

*Comparison of 1 mL volume syringes

Areas of application per syringe type

| | | classic 167 / 187 / 287 syringes | | | | | | | |
|-------------------------------------------------------------------------------------|---------------------------------------------------|----------------------------------|-------------|-------------|------------|----------|----------|---|---|
| | | 0,025-0,3 mL | 0,1-0,5 mL | 0,1-1 mL | 0,3-2 mL | 0,5-5 mL | 1-10 mL | | |
| | | ultra 1810 syringe | | | | | | | |
| | | 0,02-0,1 mL | 0,05-0,2 mL | 0,05-0,3 mL | 0,1-0,5 mL | 0,1-1 mL | 0,3-2 mL | | |
|  | Fish | ● | ● | ◐ | ◐ | ◐ | ◐ | | |
|  | Pigeons Chicken | | ● | ◐ | ◐ | | | | |
|  | Rabbits | | ● | ◐ | ◐ | | | | |
|  | Chicks | | ● | ◐ | ◐ | | | | |
|  | Ducks | | ● | ◐ | ◐ | ◐ | | | |
|  | Poultry | | | ◐ | ◐ | ◐ | | | |
|  | Eggs | | | | ◐ | ◐ | | | |
|  | Turkey Large birds Pigs, piglets | | | | ◐ | ◐ | ◐ | | |
|  | Lambs Goats Sheep | | | | | ◐ | ◐ | | |
|  | Young cattle | | | | | | ◐ | ● | |
|  | Cattle | | | | | | | ● | ● |
|  | Horse, camel and other big animals | | | | | | | | ● |

The information given in the table is meant as a general guide and may vary. The user is responsible for the proper choice of syringe model per application.

Vial and tube feeding models

Excellent hand balance



Vial feeding *ultra 1810* model

Standard supply includes:

- Luer Lock nozzle
- Barrel washer
- Bottle lock
- Connection tubing
- Operating instructions

New



Tube feeding *ultra 1810* model

Standard supply includes:

- Luer Lock nozzle
- 1 m feed tubing
- Sinkers
- Feed needle and vent cannula
- Operating instructions

Tube feeding *ultra 1810* model with Abacus™

This advanced syringe combines tube feeding functionality and a built-in Abacus™ shot counter, offering a comprehensive solution for precise injectables delivery and dosage management. Shot counter performs precise counts of every injection. Abacus™ shot counter is not autoclavable.

Syringes supplied with a spare part bag, including barrel washer, plunger O-ring, and guide for O-ring (only for sizes up to 0.3 mL). Spare part bag also available separately.

see page 8

Performance and ordering information

| Volume range (mL) | Division (mL) | Precision (CV%) | | | Cat. No. | | |
|-------------------|---------------|-----------------|-----------|-----------|-------------------------------|-----------------------------|------------------------------------------|
| | | Min. vol. | Mid. vol. | Max. vol. | 1810.1 model with vial holder | 1810.2 model with feed tube | 1810.6 model with feed tube and Abacus™* |
| 0.02 – 0.1 | 0.005 | < 1.8% | < 1.2% | < 0.5% | 1810.1.05001 | 1810.2.05001 | 1810.6.05001 |
| 0.05 – 0.2 | 0.01 | < 1.6% | < 1.0% | < 0.5% | 1810.1.05002 | 1810.2.05002 | 1810.6.05002 |
| 0.05 – 0.3 | 0.025 | < 1.4% | < 0.9% | < 0.45% | 1810.1.05003 | 1810.2.05003 | 1810.6.05003 |
| 0.1 – 0.5 | 0.05 | < 1.2% | < 0.8% | < 0.4% | 1810.1.05005 | 1810.2.05005 | 1810.6.05005 |
| 0.1 – 1 | 0.05 | < 0.7% | < 0.6% | < 0.4% | 1810.1.0501 | 1810.2.0501 | 1810.6.0501 |
| 0.3 – 2 | 0.1 | < 0.6% | < 0.5% | < 0.4% | 1810.1.0502 | 1810.2.0502 | 1810.6.0502 |

Tests performed with bidist water, using stainless steel cannula (1.2 x 50 mm), at constant working speed. Performance data may vary based on liquid type, viscosity and needle size.
 *The usable volume range of the 1810 syringe, when used with Abacus™, may vary, particularly at the lower end of the volume spectrum. For detailed information, please visit the product webpage or consult the Quick Guide.

Accessories and parts

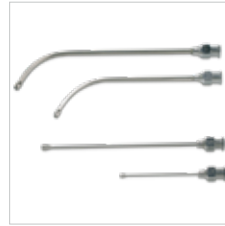
Accessories



Anti-blocking factor (ABF™)

The ABF™ lubricant is non-oily and antiadhesive, non-toxic and silicone-free. A thin layer on metal plunger effectively protects against corrosion.

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



Drenching cannulas

Adapted for the safe feeding or administration of medication to animals through the nose or mouth. Available straight or curved with a rounded end, the Luer Lock cannulas perfectly fit onto the syringe nozzle. Made of stainless steel, autoclavable at 121 °C / 250 °F.

| Size (ø x L) | Packaging | Cat. No. | |
|--------------|-----------|------------------|--------------|
| | | Straight version | Bent version |
| 0.9 x 25 mm | 3 / pk | 376.0925S | 376.0925B |
| 1.2 x 51 mm | 3 / pk | 376.1251S | 376.1251B |
| 1.6 x 102 mm | 2 / pk | 376.16102S | 376.16102B |
| 3.0 x 203 mm | 2 / pk | 376.30203S | 376.30203B |



Cleaning brushes

Cylinder and tube brushes with tufted end and plastic handle for glass barrel and tube cleaning.

| Description | Packaging | Cat. No. |
|--------------------------------|-----------|-----------|
| For barrels up to 1 mL | 6 / pk | 1.170.301 |
| For 1, 2, 5 mL barrels | 6 / pk | 1.170.305 |
| For 5, 10 mL barrels | 6 / pk | 1.170.320 |
| Set of 6 nylon brushes, 2 each | 6 / pk | 1.170.300 |

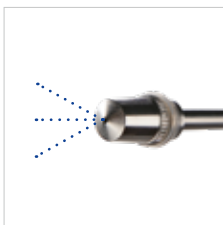


Draw off needle

Draw off needle allows easy connection of aspiration tubing to a vial or to a hanging flexible pouch. Its sharp pointed tip easily pierces the rubber membrane. A lateral air inlet, protected by a filter blocks the entry of dust or particles.

Needle intended for single use only. It should be changed once removed from the vial to avoid risk of contamination.

| Description | Packaging | Cat. No. |
|-----------------|-----------|-----------|
| Draw off needle | 6 / pk | 1.187.590 |



Cannulas with sprayer nozzle

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

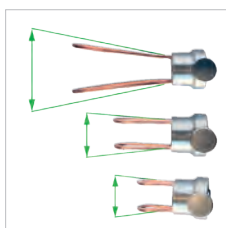
| Size (ø x L) | Packaging | Cat. No. |
|--------------|-----------|-----------|
| 3.0 x 180 mm | 1 pc | 370.30180 |
| 3.0 x 500 mm | 1 pc | 370.30500 |



Rigid extension tubing

Made of a rigid PVDF, the extension tubing is available in two lengths (20 and 35 cm). It significantly increases distance between hand and animal. Great safety when injecting through a grid, in a truck or simply to avoid bending down when vaccinating pigs.

| Description | Packaging | Cat. No. |
|-------------|-----------|----------|
| 20 cm long | 1 pc | 1.187.20 |
| 35 cm long | 1 pc | 1.187.35 |



FishGuide™

Accessory providing for correct needle positioning while injecting fishes. It reduces risks of fish wounds and protects the user from possible injuries. FishGuide™ can be positioned 360° on the syringes to adapt to the best working position. It can be installed and removed in no time without any tools.

| Description | Packaging | Cat. No. |
|------------------------|-----------|------------|
| FishGuide™, 15 mm long | 1 / pk | 1.1810.015 |
| FishGuide™, 25 mm long | 1 / pk | 1.1810.025 |
| FishGuide™, 45 mm long | 1 / pk | 1.1810.045 |



Abacus™ shot counter

Shot counter performs precise counts of every injection. The device is easily installed and removed and has a priming/rinsing position disabling shot counting. Casing is water-tight to prevent water from entering and damaging the mechanism. Abacus™ is not autoclavable.

| Description | Packaging | Cat. No. |
|-------------------------------------|-----------|------------|
| Counter for 0.1 and 0.2 mL syringes | 1 / pk | 1.1810.962 |
| Counter for 0.3 and 0.5 mL syringes | 1 / pk | 1.1810.966 |
| Counter for 1 and 2 mL syringes | 1 / pk | 1.1810.967 |
| *Magnet for reset | 1 / pk | 1.1810.160 |

Spare parts



Replacement cannulas

Supplied with tube feeding syringes. Vent cannula introduced into stopper allows air flow into vial. When connected to syringe tubing, feed cannula provides for liquid aspiration from a bottle. Made of chrome plated brass (except 187.933: stainless steel).

| Description | Packaging | Cat. No. |
|---------------------------------------------------------------------|-----------|----------|
| Vent cannulas, plastic / SS syringes 0.1 to 2 mL, short 1.2 x 40 mm | 10 / pk | 187.933 |
| Feed cannulas, chrome-plated, syringes 0.1 to 2 mL, long 3 x 190 mm | 1 / pk | 1810.973 |



Vial holder conversion set

Set for converting *ultra* 1810 tube feeding syringe into vial holder model. It includes one of each: vial holder, tube connector and bottle-lock. No tools needed for instant mounting on syringe.

| Description | Packaging | Cat. No. |
|-----------------------------|-----------|------------|
| Vial holder set | 1 / pk | 1.1810.010 |
| Replacement tube connector | 1 / pk | 1810.716 |
| Replacement duck bill valve | 1 / pk | 1810.975 |



White oil for plunger O-ring

Quality paraffin white oil intended for use with self-refilling syringe *ultra* 1810. A small drop added at barrel entry facilitates plunger movement when fitted with O-ring.

| Description | Packaging | Cat. No. |
|--------------|-----------|------------|
| 50 mL bottle | 1 / pk | 1.1810.700 |

See other accessories on page [18](#)



Spare part kits

Spare part set is supplied with each syringe in a separate bag. Content up to 0.3 mL: 2 compact cartridges (inlet valve, outlet valve) 2 barrel washers, 2 plunger O-rings, 1 guide for O-ring. Bag content as of 0.5 mL: 2 compact cartridges (inlet valve, outlet valve) and 3 barrel washers.

| Description | Packaging | Cat. No. |
|-------------------------------|-----------|--------------|
| Kit for valve, syringe 0.1 mL | 1 bag | 1.1810.72001 |
| Kit for valve, syringe 0.2 mL | 1 bag | 1.1810.72002 |
| Kit for valve, syringe 0.3 mL | 1 bag | 1.1810.72003 |
| Kit for valve, syringe 0.5 mL | 1 bag | 1.1810.72005 |
| Kit for valve, syringe 1 mL | 1 bag | 1.1810.7201 |
| Kit for valve, syringe 2 mL | 1 bag | 1.1810.7202 |



Spare valves

Compact valve cartridges, easy to handle and interchangeable. Valve shapes ensure proper positioning.

| Description | Color | Packaging | Cat. No. |
|-----------------------------|--------|-----------|----------|
| Intake valve (0.1 - 0.5 mL) | red | 1 pc | 1810.915 |
| Outlet valve (0.1 - 0.5 mL) | red | 1 pc | 1810.945 |
| Intake valve (1 - 2 mL) | yellow | 1 pc | 1810.916 |
| Outlet valve (1 - 2 mL) | yellow | 1 pc | 1810.946 |



Replacement feed tubing

Spare feed tubing made of long-lasting medical grade silicone. Autoclavable at 121 °C / 250 °F or sterilizable in boiling water.

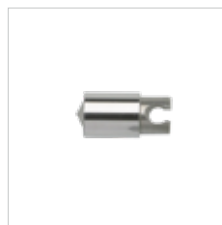
| Description | Packaging | Cat. No. |
|-----------------------------------------|--------------|----------|
| Feed tubing, 1 m, ≤ 0.3 mL | 1 pc | 1810.705 |
| Feed tubing, 1 m, ≥ 0.5 mL | 1 pc | 187.705 |
| Feed tubing, uncut, 0.1, 0.2 and 0.3 mL | by the meter | 1810.710 |
| Feed tubing, uncut, 0.5 to 2 mL | by the meter | 187.710 |
| Feed tubing, 10 m, ≤ 0.3 mL | 1 pc | 1810.910 |



Spare glass barrels

Graduated barrels. Barrels and plungers are interchangeable. Replacing a barrel does not necessarily require the change of the plunger.

| Description | Packaging | Cat. No. |
|---------------------------|-----------|-----------|
| Barrel for 0.1 mL syringe | 6 / pk | 01810.001 |
| Barrel for 0.2 mL syringe | 6 / pk | 01810.002 |
| Barrel for 0.3 mL syringe | 6 / pk | 01810.003 |
| Barrel for 0.5 mL syringe | 6 / pk | 01810.005 |
| Barrel for 1 mL syringe | 6 / pk | 01810.01 |
| Barrel for 2 mL syringe | 6 / pk | 01810.02 |

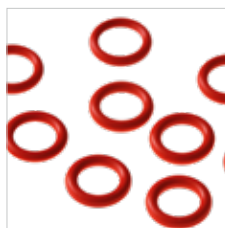


Spare plungers

Made of stainless steel. Supplied with O-ring for volumes up to 0.3 mL.

| Description | Packaging | Cat. No. |
|-----------------------------|-----------|----------|
| Plunger for 0.1 mL syringe* | 1 pc | 1810.981 |
| Plunger for 0.2 mL syringe* | 1 pc | 1810.982 |
| Plunger for 0.3 mL syringe* | 1 pc | 1810.983 |
| Plunger for 0.5 mL syringe | 1 pc | 1810.585 |
| Plunger for 1 mL syringe | 1 pc | 1810.586 |
| Plunger for 2 mL syringe | 1 pc | 1810.587 |

*O-ring included



Spare O-ring

Made of robust FEP elastomere, the O-ring guarantees perfect plunger tightness.

| Description | Packaging | Cat. No. |
|-----------------------------------|-----------|----------|
| Plunger O-ring for 0.1 mL syringe | 10 / pk | 1810.951 |
| Plunger O-ring for 0.2 mL syringe | 10 / pk | 1810.952 |
| Plunger O-ring for 0.3 mL syringe | 10 / pk | 1810.953 |



Guide for plunger O-ring

Simple tool for easy O-ring replacement. One guide is also supplied in each spare part kit.

| Description | Packaging | Cat. No. |
|------------------------------------------|-----------|----------|
| Guide for plunger O-ring, syringe 0.1 mL | 10 / pk | 1810.971 |
| Guide for plunger O-ring, syringe 0.2 mL | 10 / pk | 1810.972 |
| Guide for plunger O-ring, syringe 0.3 mL | 10 / pk | 1810.973 |

Sustainability

Socorex instruments are designed to last. When parts get damaged, they can be easily replaced. All parts are interchangeable and contribute to the longevity of the products. Durability and waste management are a longtime priority for Socorex.



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