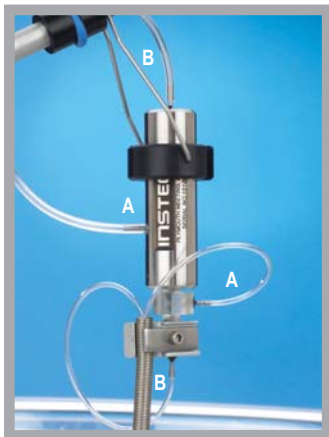


# Instructions for Use: Low-Torque Dual Channel Swivel

375/D/22LT



## Intended Use

To prevent tangling of two independent fluid channels during infusion and/or blood sampling with mice. The low-torque seal design is similar to the 375/D/22QM model so that a mouse can turn it, but the channels are stainless steel, not quartz-lined. The inner diameter of the channels is approximately .010in (.25mm), equivalent to 25ga, and therefore about 3x the cross-sectional area of the 'QM model. The outer diameter is 22ga. To be used in combination with a spring tether.

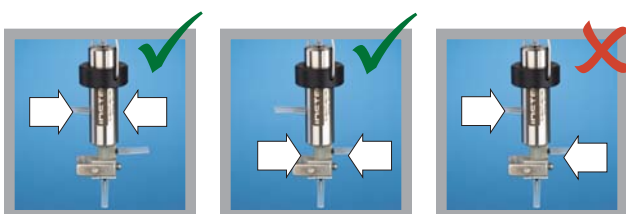


The 'LT' looks nearly identical to the 'QM' model. It can be distinguished by the letters "LT" stamped on the swivel body.

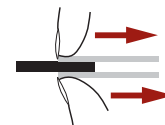
## Warnings

Please take extra care with model 375/D/22LT swivels. Note the warnings below. These swivels are delicate and often cannot be repaired if damaged or clogged.

- Do not autoclave. Sterilize by EtO or cold sterilant.
- Pull water then air through swivel channel immediately every use to prevent clogs.
- Do not force fluid through swivel manually with a syringe.
- Support swivel directly opposite when installing tubing on side channels to avoid loads that can damage seals.



- Slide tubing off swivel using fingernails; do not pull.
- Do not disassemble.



## Use

1. Sterilize fluid path prior to use with EtO or liquid sterilant.
2. Hold swivel above the cage in a counter-balanced arm. SMCLA recommended for mice. Tighten mount to swivel body, not cap.
3. Attach spring tether to V-block of universal clamp using included 0.050" allen wrench.
4. Attach fluid lines, noting connection of side channel (A) and center channel (B).
5. Clean after every use to prevent built up of salt crystals or particulate that can clog the small diameter channels. Use a syringe to suck water or sterilizing solution back through the swivel. Alcohol will not dissolve salts. Never force fluids through a swivel with a syringe or pump as the pressures this generates can damage the seals. Next, dry the insides by using the syringe to pull air through the swivel.

## Troubleshooting and Repair

If an 'LT swivel is blocked, leaking or does not rotate freely, it must be returned to Instech for repair or, more likely, replacement. In no case will the cost of repair exceed the price of a new swivel. 'LT swivels cannot be repaired by users. Disassembly can cause irreparable damage.

Before returning any swivels, please request an RA number at: <http://www.instechlabs.com/Support/returns/>

## Specifications

See <http://www.instechlabs.com/downloads/swivels.pdf>.