

Restek is pleased to offer OPTI-MAX check valves from Optimize Technologies for maximum performance and ease of use.

- Housings and cartridges are precision manufactured from the most durable materials to the industry's highest standards.
- Free-Turn housings can be removed with the tubing still attached, making maintenance fast while reducing fitting wear.

For replacement OPTI-MAX cartridges and other Restek instrument parts and supplies, visit **www.restek.com**

Questions about this or any other Restek product?
Contact us or your local Restek representative
(www.restek.com/contact-us).

RESTEK



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Printed in the U.S.A.

#730-82-001
Rev. date: 11/20



OPTIMIZE
TECHNOLOGIES

www.optimize-tech.com

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OPTI-MAX

Check Valves



Change your check
valve cartridges less
often and more easily.

RESTEK

Installing OPTI-MAX Housing and Cartridge for the First Time

1. Stop pump flow and remove all old check valve components. Clean and visually inspect all check valve ports. Remove the pump head from the pump if necessary.
2. Remove the shipping caps from your OPTI-MAX check valve housing assemblies. Cartridges are already placed into the inlet and outlet housings in the correct flow orientation. If you remove the cartridge from the housing, be sure to reinstall it correctly. The arrow on the side of the cartridge indicates the direction of flow.
3. Hand tighten each housing (with cartridge inside) into the appropriate check valve port on the pump head. The housing should thread in fairly easily without much resistance. If it seems to stick, don't force it! Back the housing out of the port and try again. If you have not removed the pump head, you may need to drop the outlet check valve cartridge into the outlet port, center it, and then tighten the housing down on top of it.

4. Once the housing is hand tight in the port, add a quarter turn with a wrench. A quarter turn should be enough for most installations.
5. Connect your inlet and outlet tubing. If you have Free-Turn housings, note the "wrench flats"—flat surfaces on either side of the fitting port. They allow you to use a wrench to prevent the top part of the housing from rotating as you tighten the fitting into place. You may not need them for polymeric fittings, but use them when installing stainless-steel fittings for the first time.
6. Resume pump flow and check for leaks. If check valve housing leaks at pump head, reinstall and wrench tighten slightly more than a quarter turn past hand tight.

Never tighten more than a half turn past hand tight.

7. Resume pump flow and continue normal operation.

Replacing OPTI-MAX Cartridge Check Valves

OPTI-MAX Free-Turn architecture allows cartridge change without breaking fluid connection lines.

1. Loosen the check valve housing from the pump head with the connecting tubing still attached.
2. Remove the old OPTI-MAX cartridge, replace it with a new one (be sure the flow arrow on the cartridge points in the right direction!), and then reinstall the housing as instructed in steps 3 and 4.



Free-Turn housing spins independently of tube port

Arrow indicates flow direction

