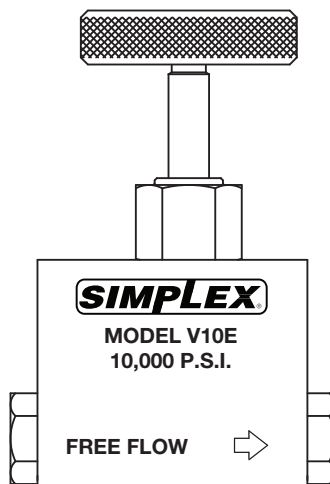




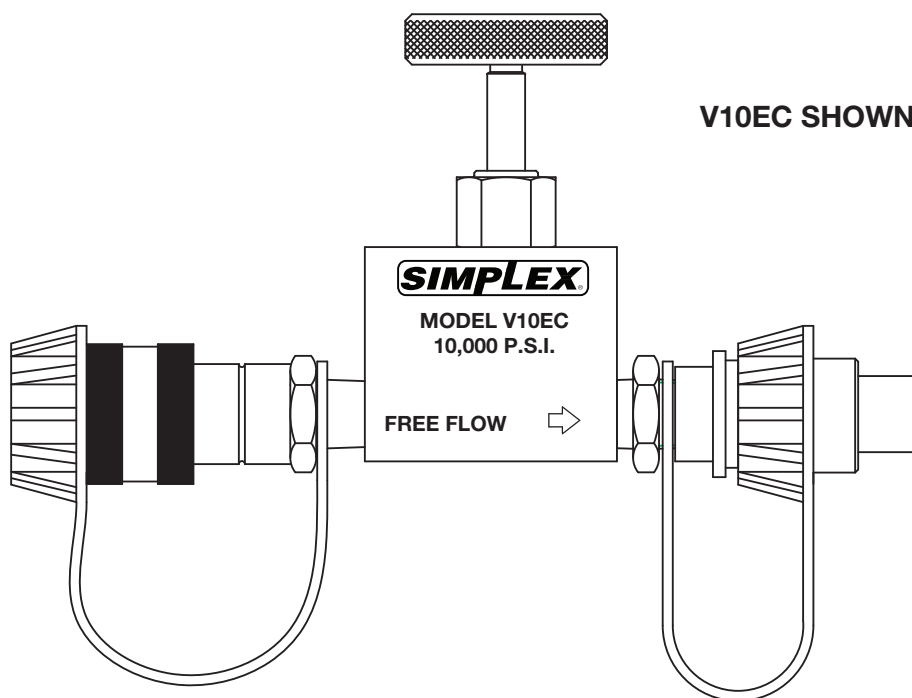
Instruction Sheet

Check Valves V10E and V10EC

54121 Rev. B 10/2019

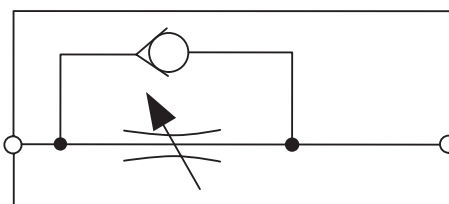


V10E SHOWN



V10EC SHOWN

HYDRAULIC
SCHEMATIC



RECEIVING INSTRUCTIONS

Visually inspect all components for shipping damage. If any shipping damage is found, notify carrier at once. Shipping damage is NOT covered by warranty. The carrier is responsible for all repair or replacement costs resulting from damage in shipment.

DESCRIPTION

V10E or V10EC is designed to operate at 10,000 psi [700 bar] from either port, and is a check and choke valve.

⚠ CAUTION

These valves are not designed for use as shut-off valves. When this valve is opened, flow is free in both directions. When this valve is closed, flow is checked from the cylinder side. Each valve has a directional flow marked on housing. They can also be used to hold a load in case system pressure is lost. With careful monitoring of system operation, this valve can be used as a flow control and metering valve for applications requiring a controlled retraction of load.

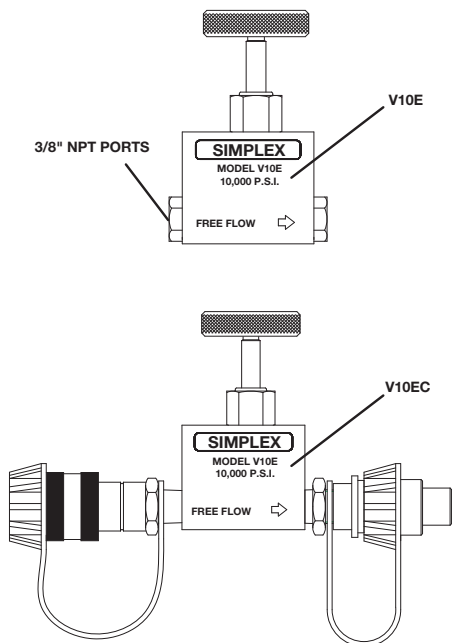
SAFETY INFORMATION

To avoid personal injury or property damage during system operation, read and follow all CAUTIONS, WARNINGS, and INSTRUCTIONS included with or attached to each product. SIMPLEX CANNOT BE RESPONSIBLE FOR DAMAGE OR INJURY RESULTING FROM UNSAFE USE OF PRODUCT, LACK OF MAINTENANCE, OR INCORRECT PRODUCT AND SYSTEM APPLICATION. Contact SIMPLEX when you have a concern about applications or safety precautions.

⚠ WARNING

- Always wear proper personal protective gear when operating hydraulic equipment.
- The system operating pressure must not exceed the maximum pressure rating of the lowest rated component in the system.
- Make sure that all components are protected from external sources of damage, such as excessive heat, flame, moving machine parts, sharp edges, and corrosive chemicals.

INSTALLATION



1. For most applications, including load holding, install the valve so that the load pressure acts against the seat, not the valve stem seals. This will increase safety and protect the life of the valve. Install V10E & V10EC valves so that the direction of flow is the same as the direction of the arrow on the side of the valve. Install valve so that the fitting from the check ball port is plumbed directly into the cylinder port.
2. Use correct fittings. V10E valve has two female 3/8" NPT ports and the V10EC has 3/8" NPT with polarized high flow couplers.
3. Use 11/2 wraps of Teflon tape (or similar thread sealant) on fittings, leaving the first complete thread free of tape or sealant to prevent sealant from entering the hydraulic system. Torque to 44-53 Ft-lbs (59.6 - 71.8 Nm).

⚠ CAUTION

Connections should be snug and leak-free. Over tightening connections promotes thread failure and may cause high pressure fittings to rupture at less than rated capacity.

⚠ WARNING

Shut-off and safety valves should be close-coupled to cylinders. NEVER allow pressurized hoses in a load-holding circuit.

4. Tighten handle to close valve. ↶ Loosen handle to open valve. ↷

⚠ WARNING

Turn handle only as far as the stop. Over tightening or subjecting the handle to excessive force will weaken and strip internal spindle threads, creating a safety hazard. Use only fingers to tighten knurled knobs. NEVER use extension handles.



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