

**Threaded end fittings on proportional relay valves 480 202 ... 0**

The connections of the proportional relay valves of the series 480 202 ... 0 have been changed from Voss 230 to Voss 232 due to requirements of vehicle manufacturers. This means that leaks may result when the parts are replaced.

In the case of vehicles manufactured prior to the second quarter 2008, check which type of thread is used in the original valve. If you find a Voss 230 type of thread with the sealing ring on the inside as shown in the illustration, adapters are to make the part compatible with devices of the type currently used.

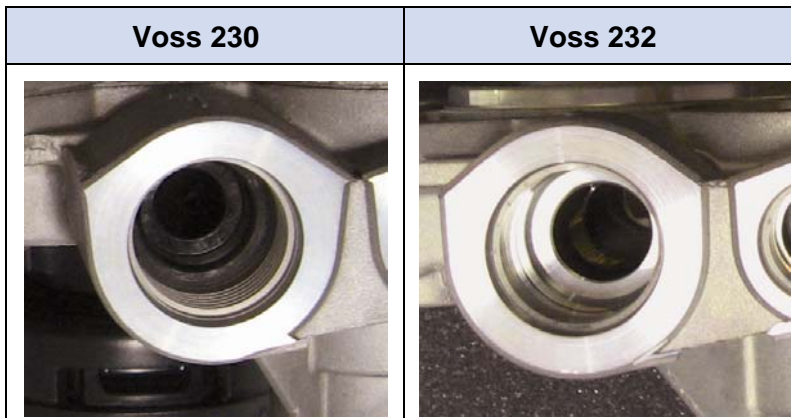


Figure:  
Adapter  
M 16x1.5

**Installation of a valve with Voss 232 in a vehicle with Voss 230 piping**

- Mark the pipes with the connection numbers of the unit.
- Remove the old unit and check the thread in connection 1 below the electrical connection as shown in the illustrations.
- If the old unit has tapped holes for Voss 230, install adapters in the new unit:
  - 1x WABCO number 893 226 689 2 for M 16x1.5. Tightening torque: 31+3 Nm
  - 3 x WABCO number 893 226 690 2 for M 22x1.5. Tightening torque: 48+5 Nm
- Install the unit in the vehicle and connect the pipes with the corresponding adapters.
- Test the system following the specifications of the vehicle manufacturer.

The adapters are available as of December.

Workshops with assembly facilities can convert the tubing to Voss 232 as an alternative.

Please note that there is a certain risk of leaks when adapters are used. For this reason, take special care when performing the leakage tests. Pressure must be applied on connection 4 to test this connection. For this purpose, apply the parking brake with the ignition switched on and then tread the pedal of the service brake in addition.

Please contact your WABCO partner if you have any questions.