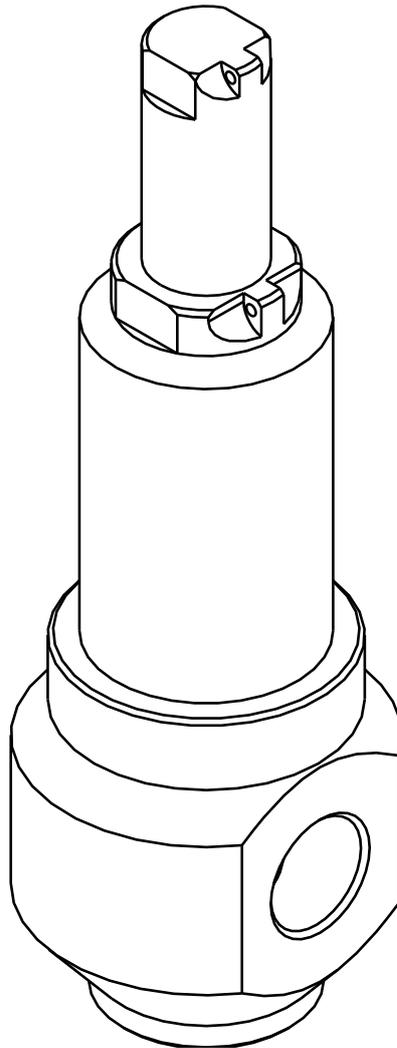


**RHPS Series
PRV 6
User Manual**

Swagelok



Read the complete manual before installing and using the valve.



WARNING

Before removing a valve from the system for service, you must

- depressurize system
- purge the system to remove any residual system media left in the valve



WARNING

Certified as a PED (2014/68/EU) Category IV safety accessories as indicated by the CE-mark.



CAUTION

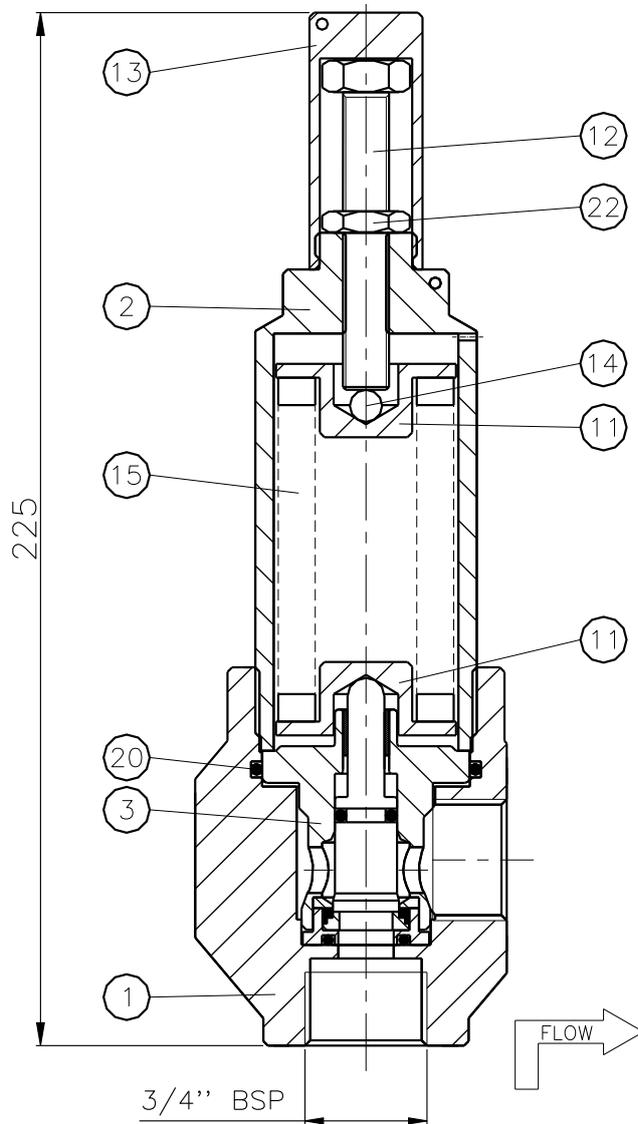
Do not use the valve as a shutoff device.

Contents

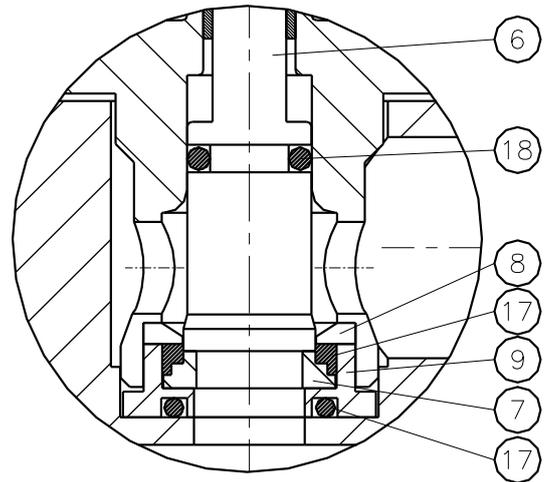
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Introduction

Representative drawing of the PRV6

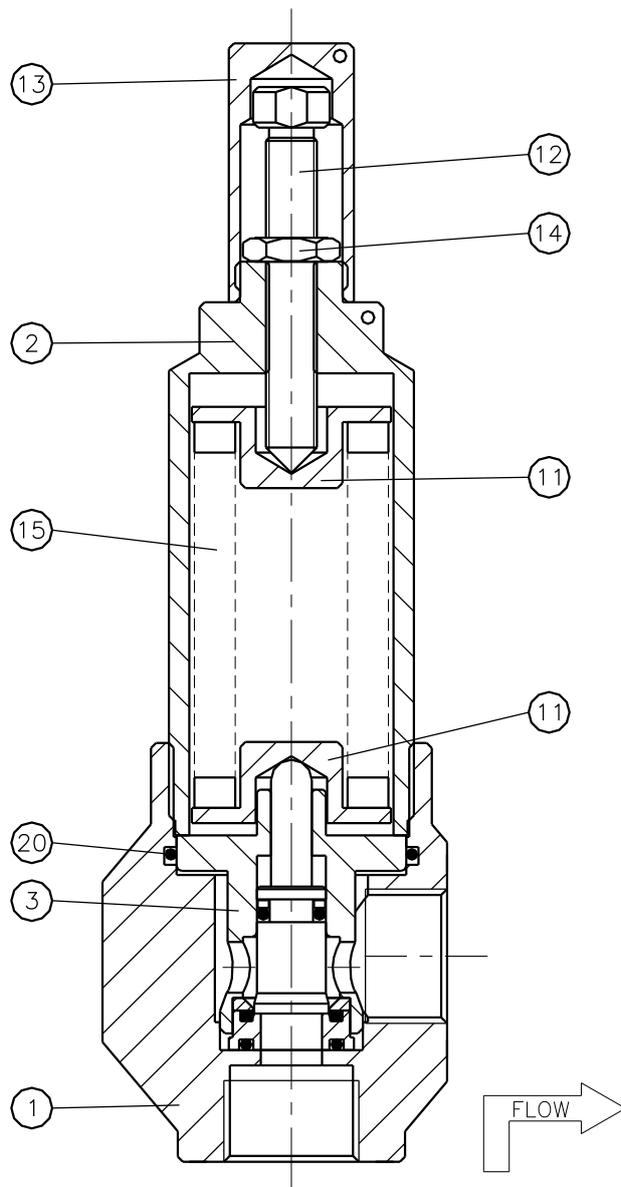


VALVE DETAIL

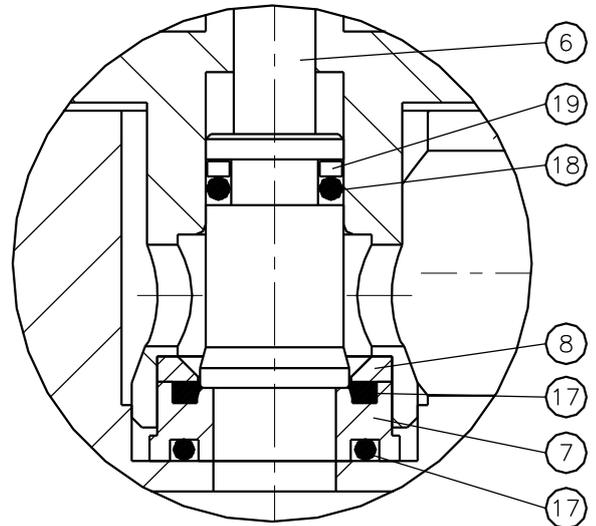


- 1 = body
- 2 = spring housing
- 3 = poppet holder
- 6 = poppet
- 7 = seat
- 8 = seat ring
- 9 = seat housing
- 11 = spring guide
- 12 = adjustment screw
- 13 = anti tamper cap
- 14 = locking nut
- 15 = setspring
- 17 = (seat) O-ring
- 18 = O-ring
- 20 = O-ring

Representative drawing of the PRV6



VALVE DETAIL



- 1 = body
- 2 = spring housing
- 3 = valve housing
- 6 = valve
- 7 = seat
- 8 = seat ring
- 11 = spring guide
- 12 = adjustment screw
- 15 = anti tamper cap
- 16 = locking nut
- 17 = O-ring
- 18 = O-ring
- 19 = back-up ring
- 20 = O-ring

Installation

Relief valve loading spring ranges

Type number	Pressure range
PRV6-02-0-N	10 to 40 bar (145 to 580 psig)
PRV6-02-1-N	40 to 80 bar (580 to 1160 psig)
PRV6-02-2-N	80 to 150 bar (1160 to 2175 psig)
PRV6-02-3-N	150 to 280 bar (2175 to 4060 psig)
PRV6-02-4-N	280 to 413 bar (4060 to 6000 psig)

Operation



WARNING

Do not exceed the specific pressure range for each valve.

Changing the set pressure

- Remove the wire lock seal.
- Remove the anti tamper cap.
- Unlock the lock nut on the set screw.
- Now the set screw can be turned.
- Turning the set screw clockwise increases the load and set pressure.
- Turning the set screw counter clockwise decreases the load and set pressure.

Maintenance

Annual maintenance is recommended under normal use.
More frequent maintenance may be required in heavy duty service.

Required tools for maintenance

- vice, to place the PRV in a secure and steady position
- wrench 13 mm
- wrench 17 mm
- wrench 20 mm
- wrench 32 mm
- pincers in various (small) sizes to take out the O-rings

Pressure venting

- If no other means of venting pressure is provided, it is possible to turn the adjustment screw counter clockwise.

Disassembly precautions

- Do not try to unscrew the spring housing before taking out the set screw first.

Disassembly

- Break the wire-lock seal.
- Remove the anti-tamper cap cover.
- Unlock locking nut.
- Turn adjustment screw fully counter clockwise.
- Loosen the spring housing.
- Remove spring housing, set spring, spring guide (2x).
- Remove poppet holder.
- Remove seat.

Inspection of disassembled parts

With all parts taken out it is now possible to inspect the components for damage.
If there is any damage or significant wear the valve and seat must be replaced.

Besides the valve/seat combination there is also the poppet/poppet holder combination. Make sure the valve is smoothly guided through the poppet holder guidance.

Assembly precautions

Follow the instructions for disassembly in reverse order to assemble the valve. Use system appropriate lubricant.

Recommended torque for all threads

- Spring housing to body 100 N·m (885 in·lb)
- Anti-tamper cap to spring housing 30 N·m (265 in·lb)

Troubleshooting

Problem:	The valve is relieving even though the inlet pressure is below the set point.
Cause:	A damaged seat O-ring, valve or seat.
Solution:	Replace for new seat O-ring, clean the valve and/or seat and check if it is closed. If not then replace.

Problem:	Leakage around the spring housing.
Cause:	A damaged O-ring or insufficient torque on the spring housing.
Solution:	Replace or tighten the spring housing.

Problem:	The valve does not open, not even at pressures higher than maximum set pressure.
Cause:	Valve is installed backwards or set spring is blocked.
Solution:	Check the installed position of the PRV and the check set spring range. If the valve is installed properly and the set spring range is adequate for the required set pressure, contact your authorized Swagelok sales and service representative.

Warranty Information

Swagelok products are backed by The Swagelok Limited Lifetime Warranty.

For a copy, visit swagelok.com or contact your authorized Swagelok representative.

For additional information, see swagelok.com.

WARNING

Do not mix/interchange Swagelok products or components not governed by industrial design standards, including Swagelok tube fitting end connections, with those of other manufacturers.

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