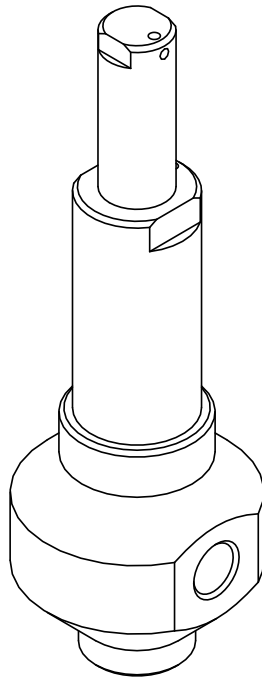



**RHPS Series
PRV 2
User Manual**

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 accessory as indicated by the CE-mark.

 **CAUTION**

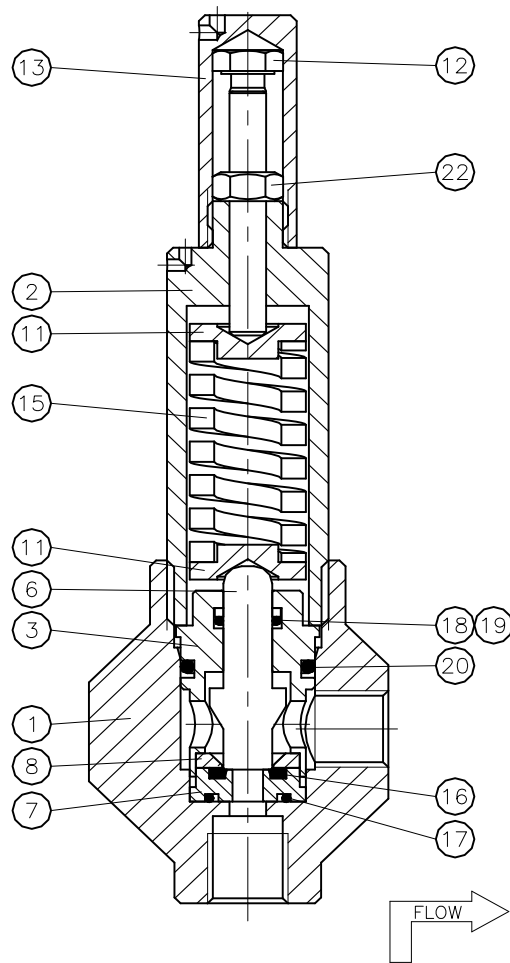
Do not use the valve as a shutoff device.

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Introduction

Representative drawing of the standard PRV2



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

Installation

Relief valve loading spring ranges

Type number	Pressure range
PRV2-02-0-N	10 to 40 bar (145 to 580 psig)
PRV2-02-1-N	40 to 80 bar (580 to 1160 psig)
PRV2-02-2-N	80 to 150 bar (1160 to 2175 psig)
PRV2-02-3-N	150 to 280 bar (2175 to 4060 psig)
PRV2-02-4-N	280 to 365 bar (4060 to 5290 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

- vise, to place the PRV in a secure and steady position
- wrench 10 mm
- wrench 13 mm
- wrench 22 mm
- pincers in various (small) sizes to take out the O-rings
- PRV2 O-ring cone (TF-4100)
- PRV cover socket (AST001191)
- PRV spring housing socket (AST001142)
- PRV2 O-ring guide (AST001164)

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 valve housing and valve.
- 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 valve/valve housing combination. Make sure the valve is smoothly guided through the valve housing.

Assembly

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

Recommended torque

- Spring housing to body 50-55 N·m (445 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 than 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 www.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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