

Monitor/Active configuration RMG 512



start-up and operating procedures

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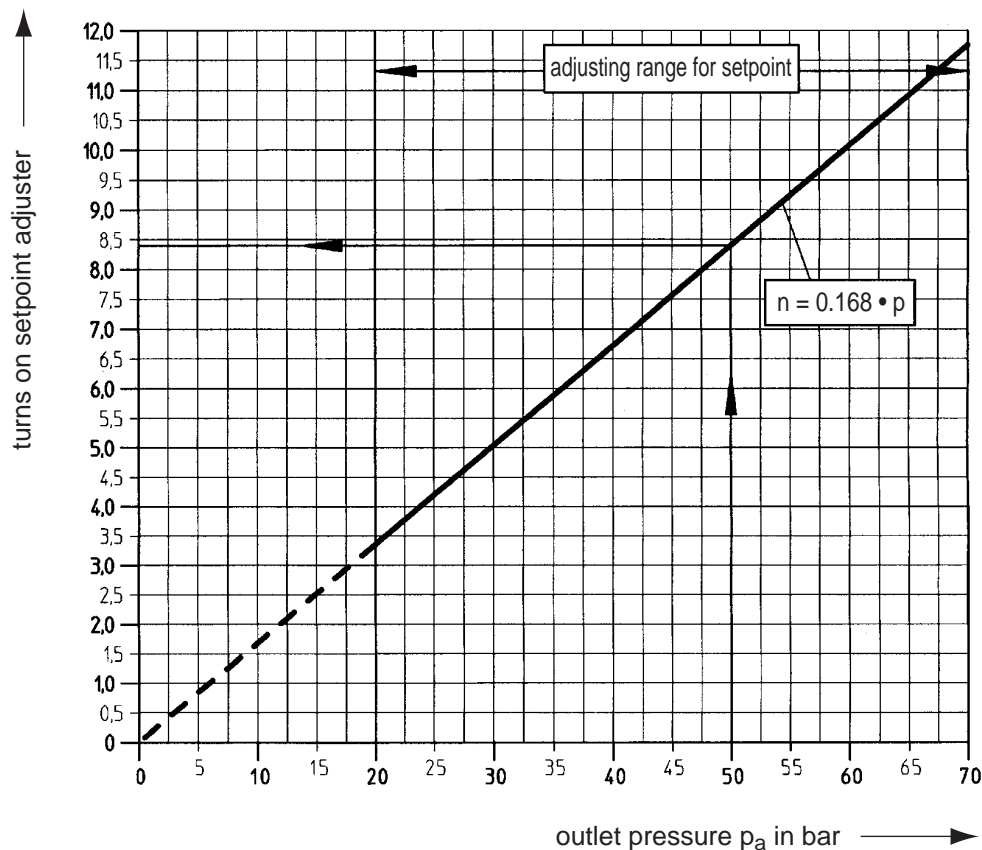
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1.) Setpoint pre-adjustment

Before beginning the start-up procedure, the inlet and outlet gate valves must be closed. The regulating line is completely depressurized, and the safety shut-off valve open and engaged (ready for use).

- Slacken setpoint springs in both load limiting pressure stages (active and monitor pilots).
- Pre-adjust the outlet pressure setpoint values on active and monitor pilots acc. to diagram below
Monitor pilot: desired outlet pressure
Active pilot: desired outlet pressure plus 1/2 to 1 turn extra

Diagram for setpoint spring with adjustment range 20 - 90 bar (RMG stock no. 10 010 444)



Hints for adjusting:

- 1 turn approx. 6.0 bar
- 1/2 turn approx. 3.0 bar
- 1/4 turn approx. 1.5 bar

Example:

- Desired setpoint value p_a = 50 bar
- $n = 0.168 \cdot 50 \rightarrow$ approx. 8,4 turns

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- Open inlet gate valve slowly.
- Adjust the load limiting pressure in the monitor pilot to 10 bar.
 - The intermediate pressure p_z between monitor and active regulator climbs up to inlet pressure value p_e .
 - Gas flows from the monitor pilot via the bleed line into the measuring point pipe section, thus increasing the outlet pressure p_a .
 - The load limiting pressure of the monitor pilot increases simultaneously, automatically keeping a pressure differential of 10 bar to the outlet pressure p_a .
- Adjust the load limiting pressure in the active pilot to 10 bar above outlet pressure p_a .
 - The outlet pressure p_a increases up to the pre-set value of the monitor pilot.
- Open vent valve, and adjust the outlet pressure value of the monitor pilot if necessary.
 - The intermediate pressure p_z drops down to a value slightly above outlet pressure p_a .
- Close vent valve.
 - The closing pressure of the monitor regulator now prevails in the measuring point pipe section.
- Open vent valve and reduce outlet pressure setpoint of the active pilot to the desired p_a -value.
 - The monitor regulator opens, and the intermediate pressure between monitor and active regulator increases up to inlet pressure value.
- Close the vent valve.
 - The outlet pressure increases up to the closing pressure value given by the **monitor** regulator.

2.) Taking into operation

If the downstream pipe system is already pressurized, then the outlet pressure setpoint value of the active pilot should be adjusted to a value a little lower down.

If the outlet pipe system is pressureless, the outlet pressure setpoint spring of the active pilot has to be slacked completely.

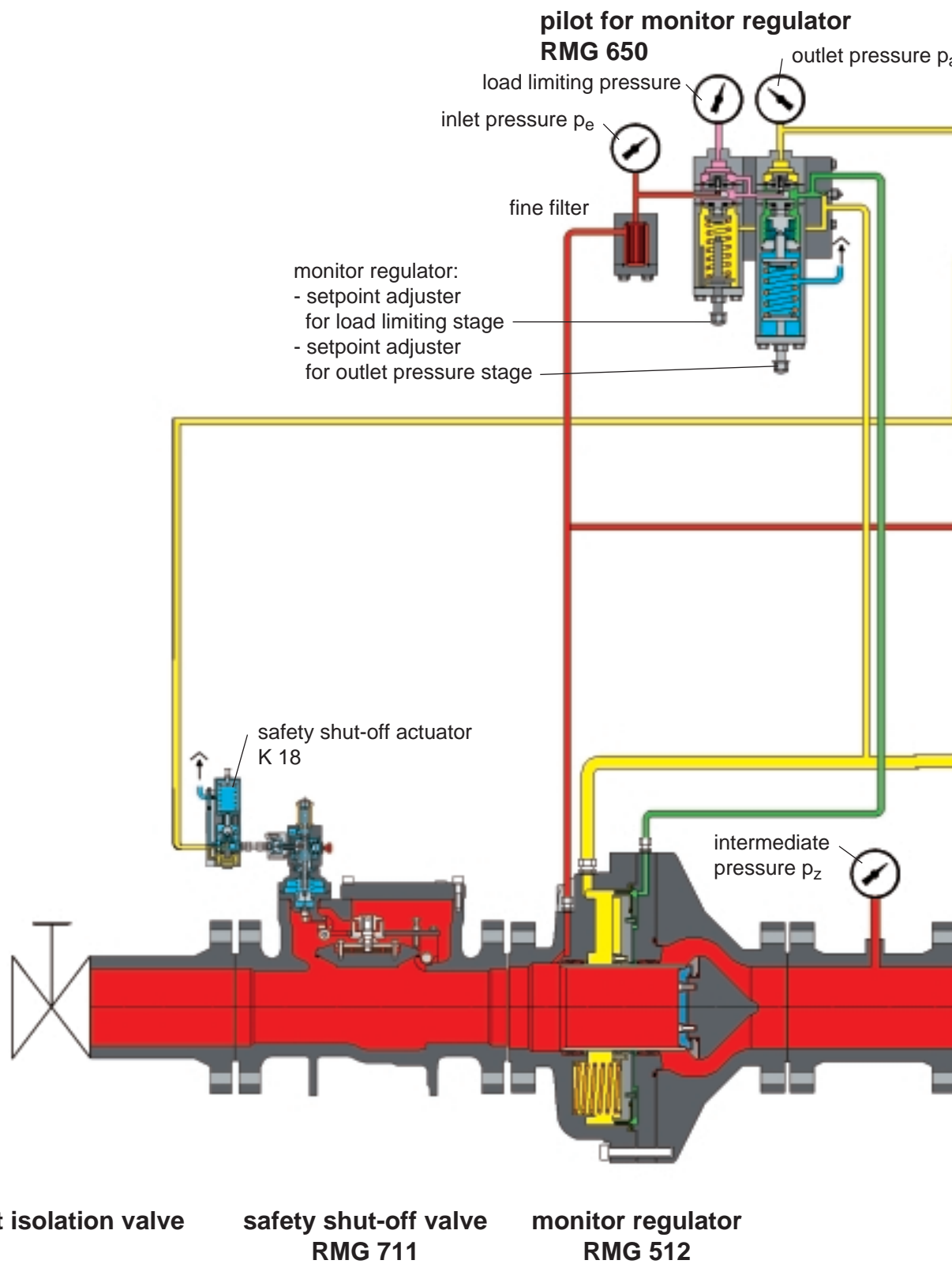
- Open outlet gate valve.
- Take line into operation through slowly increasing the outlet pressure setpoint value of the active pilot and adjust the outlet pressure value to the desired height.
- When in operation the outlet pressure setpoint value of the monitor regulator can be checked by increasing the outlet pressure setpoint value of the active regulator. Thus the monitor regulator takes over.

Note

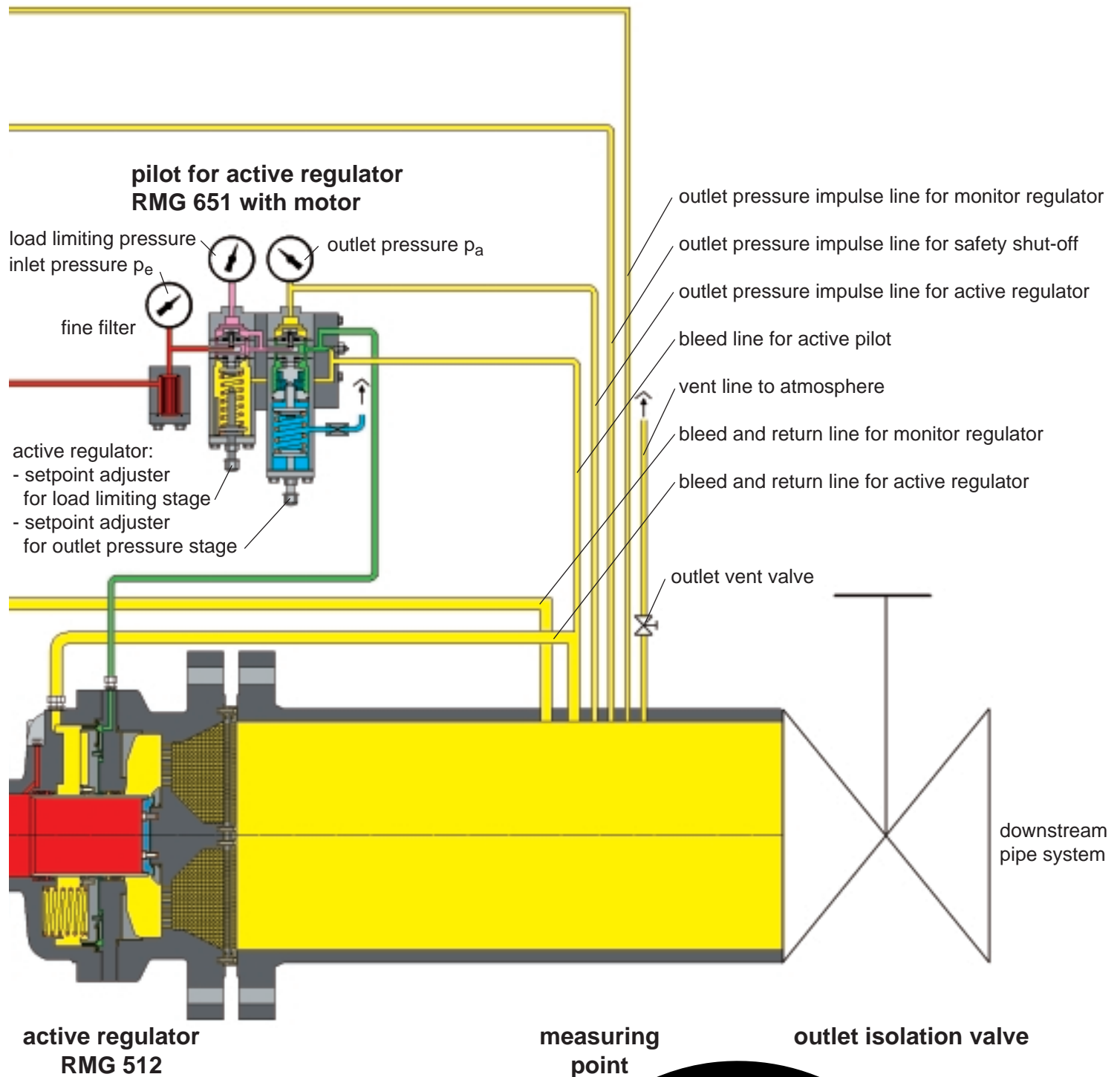
The outlet pressure setpoint value of the monitor regulator should be adjusted to a minimum differential of 1.5 bar above the outlet pressure value of the active regulator to ensure that the monitor regulator is completely open under normal service conditions.



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3.) Closing down

- Reduce outlet pressure setpoint value of the active pilot by turning the adjustment anti-clockwise.
 - The active regulator closes.
- Close outlet gate valve
 - The outlet pressure increases up to the closing pressure of the monitor regulator.
- Close the inlet gate valve.
- Open vent valve connected to the measuring line.



Warning! The device must be completely depressurized before dismantling for maintenance!

For further details on maintenance procedures please refer to the relevant RMG-leaflet.

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