

Product information

Back-Pressure Regulator



For handling and safety reasons, please read the corresponding technical documentation.



Fig. 1 Back-Pressure Regulator

Pressure decrease after the column can lead to formation of air bubbles in the detector flow cell resulting in baseline noise and drift. The back-pressure regulator provides a quick and convenient way to improve the stability of detector baseline by providing a constant back-pressure on the flow cell, which stops the release of dissolved gases from the mobile phase.

The back-pressure regulator has a very low dead volume. A spring-loaded diaphragm provides the force that generates the back-pressure. Spring tension may be adjusted to vary the back-pressure without disconnecting any lines. Leakage of the back-pressure regulator can be often reduced to damage of the including membrane.

Attaching and function

Precondition

- The system is pressureless

NOTICE

Membrane damage

Damage of the membrane caused by over-pressure during operations. Pay attention to the maximum pressure.

- 20 bar for A70087
- 130 bar for A70088
- 300 bar for A70084

Tools

- Open-end wrench, size 13 mm

Process

1. Connect the capillaries (no direction).
2. Adjust the pressure by tighten the adjust screw ① (see fig. 2).
3. Fixate the adjust screw via the nut ② with the open-end wrench (see fig. 2).

Replacing membrane

Precondition

- The back-pressure regulator is removed from the system

Tools

- Allen wrench, size 2.5 mm.

Process

1. Unscrew the screws with the allen wrench 2.5 mm.
2. Open the lid and remove the damaged membrane ④ (see fig. 2).
3. Unscrew the adjust screw ① until the stamp ③ is even with the plate (see fig. 3).
4. Place the new membrane in the center of the plate.
5. Mount the lid on the back-pressure body and tighten it with the allen wrench 2.5 mm.

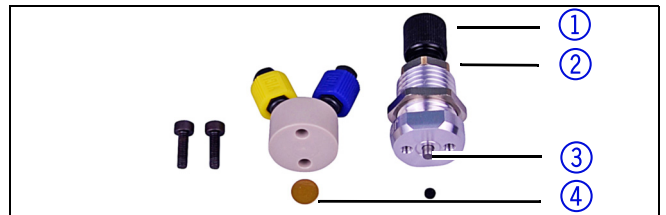


Fig. 2 Disassembled Back-Pressure Regulator, stamp outside

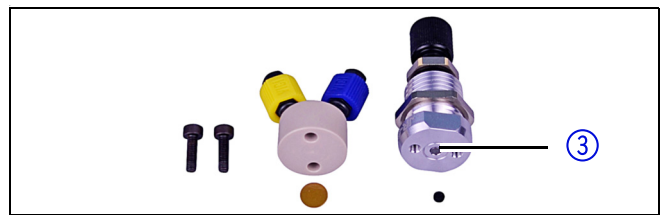


Fig. 3 Disassembled Back-Pressure Regulator, stamp inside

Repeat orders

Name	Order no.
Biocompatible back-pressure regulator 0-20 bar	A70087
Biocompatible back-pressure regulator 20-103 bar	A70088
Back-pressure regulator (stainless steel) 90 -300 bar	A70084
5 spare membranes	A70082