SOMATEC® Components for mech. engineering

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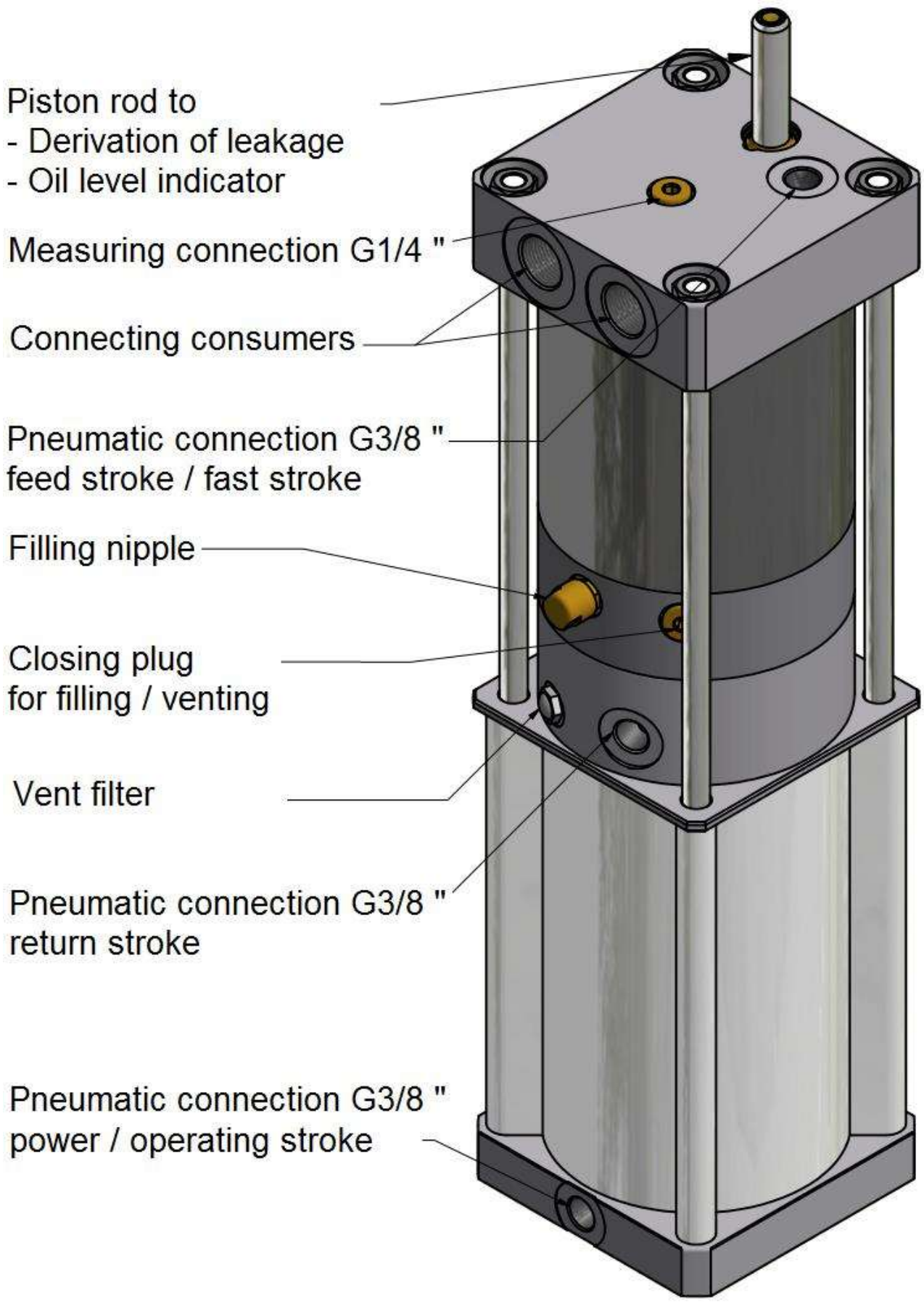
Pressure booster DU125 NT

Pneumatic - hydraulic - double acting

Patent pending

Available in gear ratios: 1:17,5, 1:25, 1:39; 1:61



*The new **Pressure booster NT** offers the following advantage:*

- **Cost savings by saving a hydraulic power unit:** Our newly developed pressure intensifier allows conventional hydraulic cylinders to be operated with rapid and power stroke. By using two intensifiers, even double-acting hydraulic cylinders can be operated in the express and power stroke.
- **Simple control:** This is done by a 3/2-way valve for the delivery stroke and a 5/2-way valve for the power stroke.
- **Any repetition of the power stroke:** With the aid of a control, the power stroke can be repeated as often as required via the 5/2-way valve. For this, the 3/2-way valve must remain switched.
- **Built-in bypass valves** prevent vacuum formation during punching and allow any repetition of the power stroke.
- The translator cylinder is equipped with **signaling** which serves to monitor or repeat the power stroke.
- A **closed oil system**, as well as an **absolute oil / air separation** ensure the highest level of operational safety.
- The use of **Seal recordingsfor** different gear ratios results in low storage costs, as all essential parts are identical. A subsequent conversion to another gear ratio is possible.
- The oil volume for the feed and power stroke, as well as the required oil reserve for safe operation of the working cylinder, can be set by the user for an additional charge. A list of the standard types follows.
- The delivery is in the filled state (if not desired, please specify when ordering)

Principle of Pressure booster NT

Our pressure booster has two pistons, one piston is responsible for the feed stroke or for the fast stroke of the working cylinder and works as a medium converter. This means that the inlet air pressure is converted 1: 1 into hydraulic pressure.
The second piston works as a booster piston, with a predetermined transmission ratio. This is responsible for the power stroke on the cylinder. Due to the built-in bypass valves in the pressure booster, the piston for the infeed stroke at any time, with decreasing working pressure, oil continue transport to the working cylinder.
This design allows the power stroke can be repeated at any time, without driving the pressure booster and cylinder in the basic position.