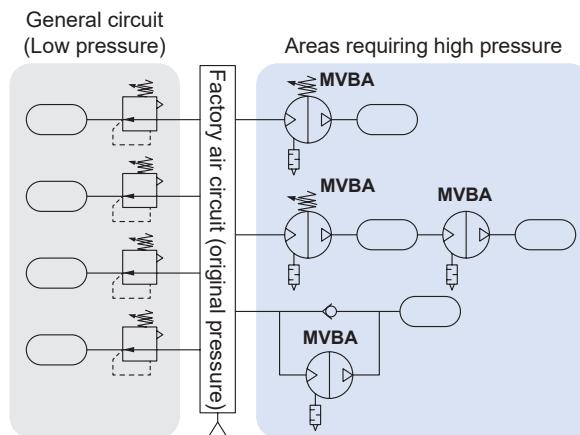


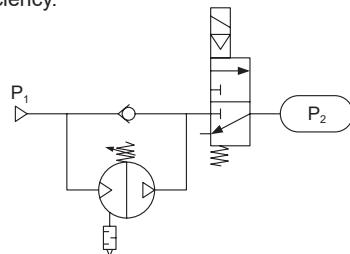
### Example of circuit usage

- In factories where only specific equipment requires high pressure, a booster cylinder can be installed in the corresponding local air circuit. This allows the overall air circuit to maintain low pressure while enabling the use of high-pressure equipment in localized areas. This design not only reduces the pressure demand on the overall air circuit but also effectively saves energy and decreases the load on the equipment.

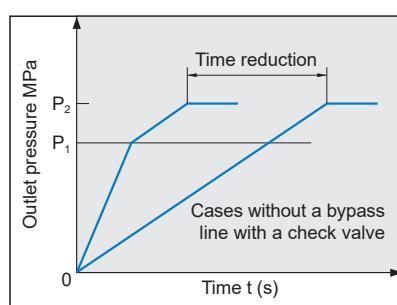


- When using two booster cylinders for two-stage boosting, ensure that each booster cylinder is supplied with sufficient airflow to maintain the stability of the inlet pressure at the booster valve. This is critical for ensuring the stability and efficiency of the boosting process.

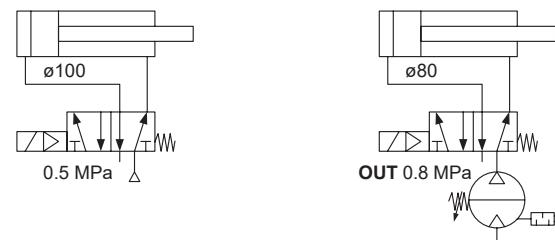
- During the process of charging the air tank, a circuit design incorporating a booster cylinder in parallel with a check valve is used. When the pressure in the air tank is lower than the inlet air source pressure, the air source directly charges the tank through the check valve. This method efficiently utilizes the air source pressure, reducing the charging time and improving overall efficiency.



The inlet pressure ( $P_1$ ) first passes through a check valve to charge  $P_2$  until  $P_1=P_2$ .



- When the actuator's output force is insufficient and spatial constraints prevent the use of a larger cylinder, a booster cylinder can be employed to increase output force without replacing the existing actuator.
- In cases where miniaturization of the drive component is required, and a small cylinder size is needed while maintaining a high output force, a booster cylinder offers an effective solution.



|                    |                              |
|--------------------|------------------------------|
| Operating Pressure | 0.5 MPa                      |
| Tube I.D.          | $\varnothing 100 \text{ mm}$ |
| Output Force       | 3850 N                       |

|                    |                             |
|--------------------|-----------------------------|
| Operating Pressure | 0.8 MPa                     |
| Tube I.D.          | $\varnothing 80 \text{ mm}$ |
| Output Force       | 4000 N                      |

- For single-acting cylinder operations, installing a booster cylinder in the corresponding air supply circuit can reduce compressed air consumption, achieving more efficient operation.

