

# P-PURIFICATION SYSTEMS

In use all over the world for the treatment of breathing air, industrial air, nitrogen, helium, argon and methane.

This product series is the undisputed classic among BAUER purification systems, offering significant advantages such as quick and straightforward cartridge change, minimum downtimes and simple, cost-effective deployment!

Depending on the filter cartridge type, residual humidity and oil vapours are reliably removed from the compressed air or gas. Toxic carbon monoxide (CO) can optionally be converted into carbon dioxide (CO<sub>2</sub>). As the content of CO<sub>2</sub> is low, the CO<sub>2</sub> concentration increases only slightly.

BAUER's rigorous quality management processes ensure that each and every P filter cartridge complies with the strict quality standards.

## OPTIONS

### › B-TIMER Filter Cartridge Monitoring System

B-TIMER displays operating times and calculates remaining filter life.

### › B-SECURUS Filter Cartridge Monitoring System

continuously measures filter cartridge moisture saturation and displays a timely warning when the cartridge needs to be replaced.

## FEATURES

- › Optimises air and gas quality
- › 85 - 3500 l/min
- › 90 - 350 bar/90 - 420 bar/350 - 500 bar



Purification System P 100 with SECURUS, automatic condensate drain system and CO conversion.

## SOPHISTICATED TECHNOLOGY FOR OUTSTANDING AIR AND GAS QUALITY.

A look inside a P-Purification system clearly reveals the outstanding expertise in engineering design demonstrated by BAUER to ensure that only pure air and gases leave the filter housing.



PURIFICATION SYSTEM	FLOW RANGE	PRESSURE RANGE	NUMBER OF FILTERS
	l/min	bar	
P 21	≤ 300 <sup>1</sup>	90 - 350	1
P 31	≤ 350	90 - 350	1
P 42	≤ 550	90 - 350	1
P 41	≤ 450	90 - 350	1
P 61	≤ 850 <sup>2</sup>	90 - 350/420/500	1
P 81	≤ 1000	90 - 350/420/500	2 (3) <sup>3</sup>

<sup>1</sup> Use with combustion engines (CO removal) only at charging rate up to 200 l/min.

<sup>2</sup> Use with combustion engines (CO removal) only at charging rate up to 680 l/min.

<sup>3</sup> Additional filter for treatment systems with CO conversion.



Purification system P 120 with SECURUS and automatic condensate drain system

**BAUER KOMPRESSOREN IS A CERTIFIED MANUFACTURER OF PRESSURE EQUIPMENT UP TO CATEGORY 4 UNDER THE EU PRESSURE EQUIPMENT DIRECTIVE PED2014/68/EU.**

### HOW THE P-PURIFICATION SYSTEM WORKS

- 1.** The compressed air is delivered to the final separator, which separates out oil and water droplets.
- 2.** The condensate from the oil- and water droplets is collected at the bottom of the filter housing and is removed via the condensate drain valve.
- 3.** The pre-purified air flows from the bottom of the vessel through the molecular sieve, which adsorbs the remaining gaseous water.
- 4.** The molecular sieve is aligned perfectly to the purification system to ensure optimum purification of the air or gas.
- 5.** The particle filter discs retain all coarse impurities.
- 6.** An activated carbon layer reliably binds harmful organic impurities such as oil vapour and hydrocarbon compounds.
- 7.** Pure air or gas leaves the filter cartridge.
- 8.** The pressure maintaining valve keeps the filter housing continuously under pressure, significantly increasing both the service life of the filter housing and operating safety.