

## THE B-KOOL SYSTEM

Clever cost savings at the same time  
as protecting the environment

- › 200 - 680 l/min
- › 100 - 350 bar
  
- › UP TO 11 TIMES LONGER LIFE FOR YOUR FILTER CARTRIDGES!
- › ENVIRONMENTALLY SOUND
- › INTEGRATED OR AS STAND-ALONE VERSION
- › EASY TO RETROFIT



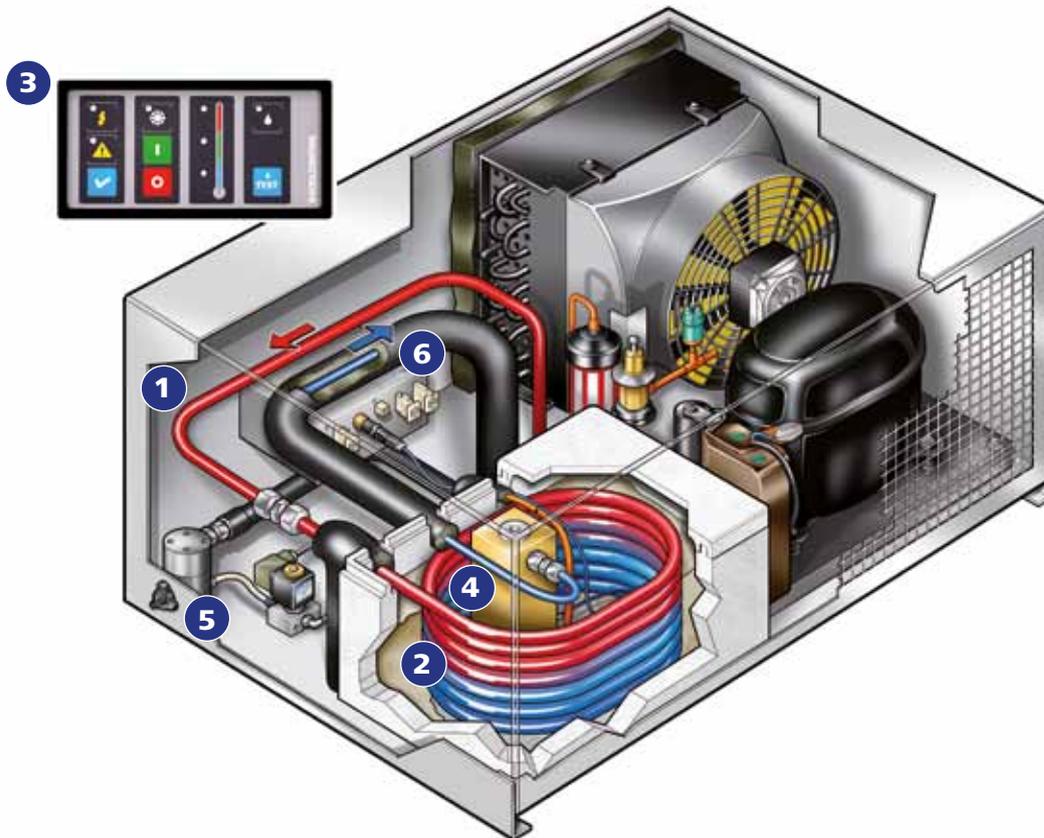
**The B-KOOL refrigeration dryer from BAUER considerably reduces the running costs of the compressor whilst protecting the environment at the same time.**

At locations with particularly high ambient temperatures, B-KOOL assures a remarkably longer life time of the filter cartridge. You will benefit from a lower cost of purchase and storage of filter cartridges, a longer uninterrupted compressor operation and a lower consumption of filter cartridges.

## That is the way B-KOOL works

Filter cartridges represent a major element of the operating costs of a compressor. But by using the original filter cartridges, you will be guaranteed that pollutants are limited according to the breathing air standard DIN EN 12021! For the safety of the customer and the operator.

The B-KOOL integrated cooling unit removes a large proportion of the humidity before it reaches the purification system. The service life of the filter cartridge is thus extended up to eleven times.



### 1 The air bearing humidity

is evacuated from the final separator of the compressor and then fed into the B-KOOL. This hot air is still 100% saturated with water and oil vapour.

### 2 In the high-efficient cooling unit

the temperature and therefore the pressure dew point of the compressed air is reduced to about 3°C. For physical reasons the cooled air can no longer retain its humidity. Result: The oil/water vapour condenses out.

### 3 The B-KOOL-CONTROL

controls the condensate valve and permanently monitors the function of the integrated cooling equipment.

### 4 In the integrated separator

the condensate, which would otherwise get into the filter cartridge, leading to a much more rapid saturation, accumulates.

### 5 Via the automatic condensate drain

the condensate is fed back into the collecting tank of the compressor unit.

### 6 The cooled and pre-dehumidified air

is fed from B-KOOL to the purification system.

## B-KOOL's benefits

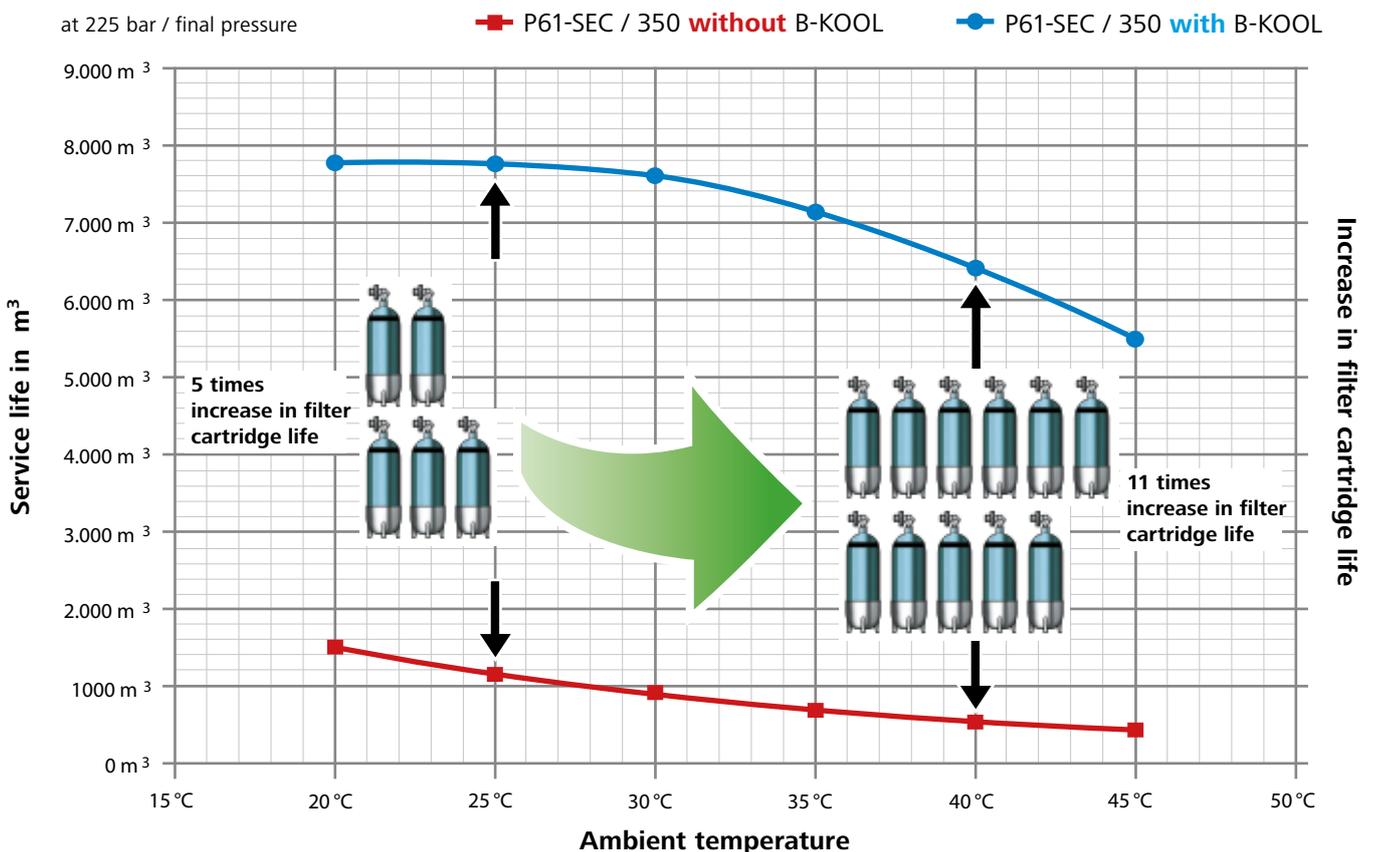
B-KOOL increases the life of the filter cartridges by such an extent that the running costs almost cease to be of significance. That is why the acquisition costs of B-KOOL will pay for themselves within a short period of time. When combined with the SECURUS filter monitoring system<sup>1)</sup> B-KOOL gives more economical operation as the filter cartridge condition is monitored to allow its full capacity to be used before replacement.

- › In addition to the reduced costs for new filter cartridges, other costs for stocking and storage are saved.
- › Due to the considerably increased life time of the filter cartridge, the maintenance requirements and the shutdown times of the compressor involved with the cartridge change are reduced.
- › In addition, the problems of storage and proper disposal of the used filter cartridges are reduced. This is particularly noteworthy for installation locations in remote areas or on islands.
- › Not least the use of B-KOOL actively protects the environment: Fewer cartridge changes means less consumption of natural resources.
- › B-KOOL is immediately ready to run for operation with the compressor, without additional lead time. This leads to considerable energy cost savings.
- › SECURUS permanently monitors the saturation of the filter cartridge and indicates in due time when the cartridge has to be replaced.
- › Owing to the newly developed automatic condensate drain, only minimal pressure losses occur during the draining of the condensate.

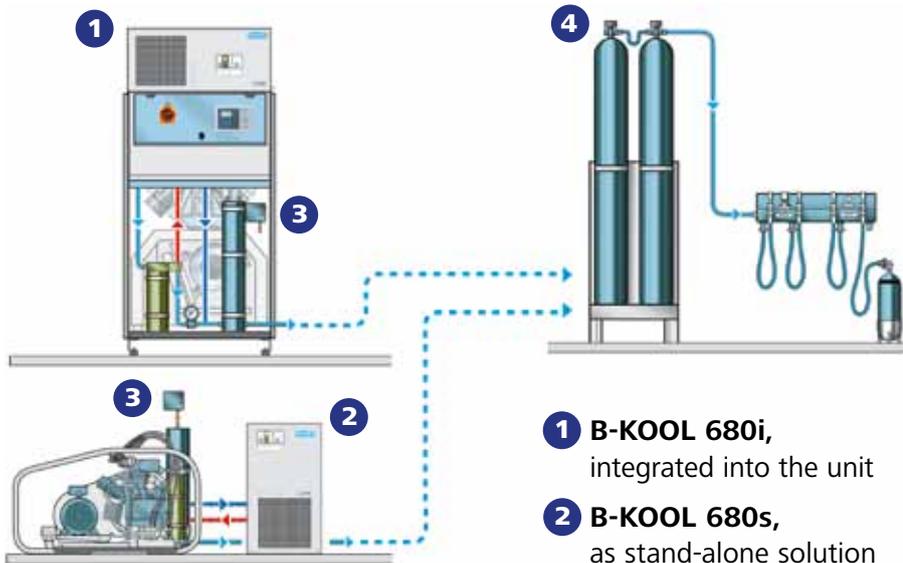
1) B-KOOL can only be used in combination with SECURUS

## Calculation example

The following graphic demonstrates the huge savings possible with B-KOOL



## System variants



- 1 **B-KOOL 680i**,  
integrated into the unit
- 2 **B-KOOL 680s**,  
as stand-alone solution

- 3 **SECURUS**,  
for the optimal use of the  
filter cartridge
- 4 **Storage bank**,  
allows for long filling  
cycles without interruption  
for operation in combination  
with B-KOOL, on units  
with small F.A.D.s.

OPTIONS	PROFI-LINE	MV III	KAP	PE TE/HE	PE VE/OPEN	VERTICUS 5	PE VE/SILENT
<b>MODEL</b>	B-KOOL 680s <sup>1)</sup>					B-KOOL 680i <sup>2)</sup> / B-KOOL 680s <sup>1)</sup>	
P41 purification system	●	●	●			●	
P42 purification system				○ <sup>3)</sup>	○		○
P61 purification system		●	●			●	
P62 purification system					○		○
P81 purification system			●			●	

● Ex factory or retrofit | ○ Only ex factory, no retrofit possible

1) for separate installation

2) integrated into the unit on site

3) only on PE 250 HE and PE 300 TE/HE

## Technical Data

<b>Medium:</b>	Air	<b>Pressure dew point<sup>3)</sup>:</b>	approx. 3° C
<b>Operating temperature:</b>	+5 - +45° C	<b>Power consumption:</b>	550 W max. at 50 Hz
<b>Intake temperature:</b>	+60° C max.	<b>Weight:</b>	approx. 48 kg <sup>4)</sup>
<b>Maximum operating pressure:</b>	350 bar		approx. 50 kg <sup>5)</sup>
<b>Minimum operating pressure:</b>	100 bar	<b>Dimensions:</b>	386 mm x 695 mm x 565 mm <sup>4)</sup>
<b>F.A.D. range<sup>2)</sup>:</b>	200 - 680 l/min	<b>(L x W x H)</b>	760 mm x 346 mm x 535 mm <sup>5)</sup>

1) no retrofit possible on the PE ranges with P42 / P62 purification system

2) cylinder filling from 0 to 200 bar

3) at 300 bar final pressure / 30°C ambient temperature / 680 l/min (pressure dew point dependent on the ambient temperature)

4) model 680s 5) model 680i