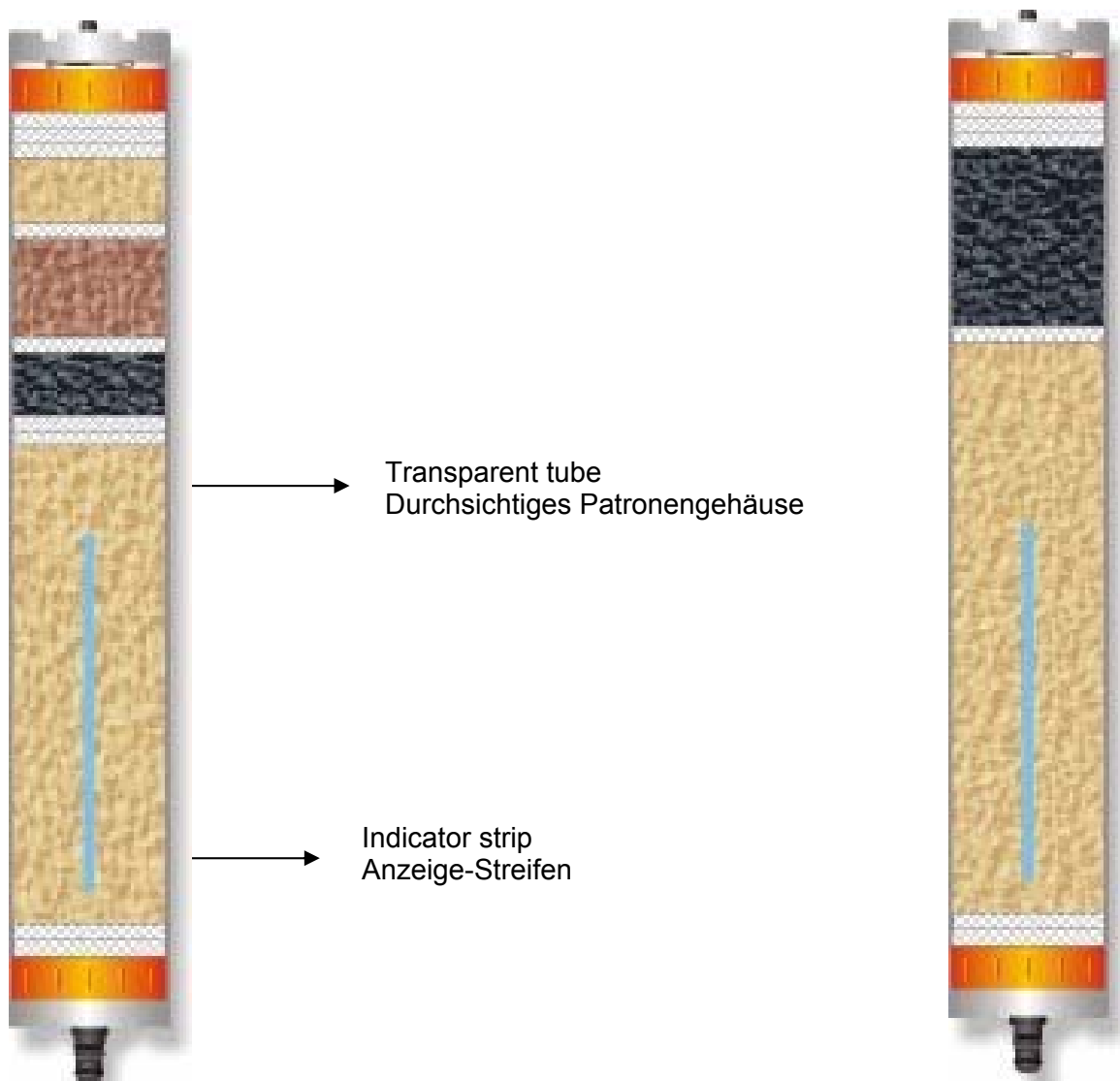


**Filter Cartridges with optical indication of saturation  
for Breathing Air Quality acc. DIN 3188/EN 12021**

**Filter-- Patronen mit optischer Sättigungsanzeige  
für Atemluftqualität nach DIN 3188 / EN 12021**



## **SAFE AND EFFICIENT**

In compliance with breathing air quality and thus dryness of the air is essential for the safety of the diver or the fire fighter.

However, air quality will only be as good as the maintenance of the filter systems and the timely exchange of cartridges.

In all breathing-air Compressors, the useful life of the cartridges is specified as operating hours of the compressor or as the number of the breathing-air bottles to be tilled or as the treatable maximum quantity of air.

However, all specifications are related to a standard ambient air temperature of 20°C.

With higher temperatures, the useful life of the filter cartridges is reduced considerably.

E.g., if a filter has a useful life of the cartridge of 25 operating hours at 20°C ambient temperature, this will be only half in case of an increase of 10°C, that means 14,25 operating hours.

The useful life changes depending on the ambient air temperature as set forth in the table below:

° C	° F	Correction Factor
<b>50</b>	<b>122</b>	<b>0.2</b>
<b>40</b>	<b>104</b>	<b>0.34</b>
<b>30</b>	<b>86</b>	<b>0.57</b>
<b>20</b>	<b>68</b>	<b>1</b>
<b>10</b>	<b>50</b>	<b>1.85</b>
<b>5</b>	<b>41</b>	<b>2.6</b>
<b>0</b>	<b>32</b>	<b>3.8</b>

Since it is nearly impossible to measure these different temperatures and exactly determine the precise useful life or the saturation period of the cartridge, the condition of the cartridge is shown by an indicator strip, which changes the colour from blue to brown according the humidity in the Molecular Sieve.

**Advantage: you can check periodically the condition of the cartridge and can use it until it is completely saturated.**