

Wafer Check Valve K4 in use with negative pressure

There is negative pressure in a system, when the pressure is lower than the atmospheric pressure.

The Praher Plastics Austria GmbH wafer check valve K4 can be used at negative pressure with the following parameters:

Material	Nominal pressure	Negative pressure [bar]	Max. temperature in use [°C] at -0,5bar
PVC-U	PN10	-0,5	RT
PP+GF	PN10	-0,5	RT
PP	PN6	-0,5	RT
PVDF	PN10	-0,5	RT

Negative pressure and temperature in use which are not listed in the above chart are as per technical design possible and may be tested and approved on customer request.

Schwertberg, 20.02.2015

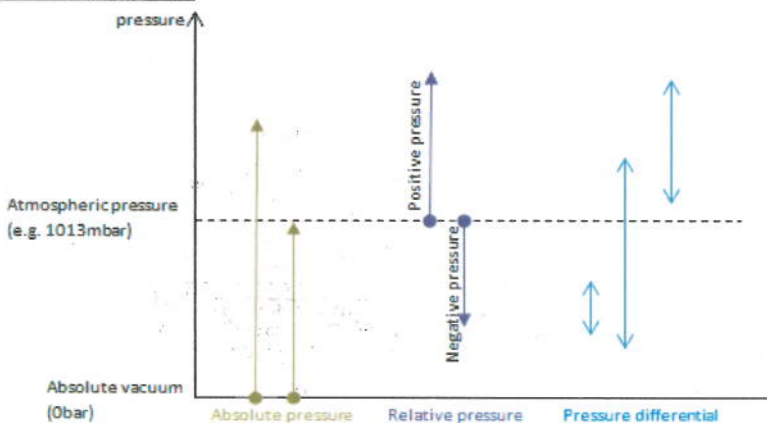
for the manufacturer:

Dr. Rainer Pühringer
Dr. Rainer Pühringer
CEO

for the manufacturer:

Pleiner Julia
Pleiner Julia MSc.
Component development

Theoretical Addition:



The **absolute pressure** is defined as the pressure which occurs with the absolute vacuum (0bar) as basis. At sea-level the absolute pressure is the same like the atmospheric pressure (1013mbar).

If the atmospheric pressure is the basis you can make a difference between **positive and negative pressure**. If the pressure is lower than the atmospheric pressure then it's negative pressure and vice versa.

The **pressure differential** can be calculated out of 2 pressure data. If there's a pressure of 1bar on one side and a pressure of 5bar on the other side, so the pressure differential is 4bar.