

## pressure gradient correction factor

*in gas chromatography*

A factor that corrects for the compressibility of the carrier gas. The values of the measured quantities obtained after multiplication by the factor  $j$  are independent of the pressure drop in the column. If  $p_i$ ,  $p_o$  are respectively the pressures of the carrier gas at the inlet and outlet of the column, then  $j$  is given by:

$$j = \frac{3 \left[ \left( \frac{p_i}{p_o} \right)^2 - 1 \right]}{2 \left[ \left( \frac{p_i}{p_o} \right)^3 - 1 \right]}$$

**Source:**

Orange Book, p. 101