k-factors for the flow rate calculation

$$q_V = k \times \sqrt{\frac{2 \times \Delta p}{\rho}}$$

q_V	=	air flow	[m³/h]
k	=	k-factor	
ρ	=	density of air	[kg/m³]
Δp	=	differential pressure	[Pa]

This formula is valid for the following brands:

- **Rosenberg Ventilatoren GmbH**
- **Gebhardt Nicotra GmbH**

$$q_V = k \times \sqrt{\Delta p}$$

q_V	=	air flow	[m³/h]
k	=	flow factor	
Δp	=	differential pressure (of static pressure)	[Pa]

This formula is valid for the following brands:

- **EBM Papst GmbH**

$$q_V = k \times \sqrt{\Delta p_w}$$ at standard state 20°C

$$q_V = \sqrt{\frac{\rho_{20}}{\rho operation}} \times k_{20} \times \sqrt{\Delta p_w}$$ in case of deviating air conditions

q_V	=	air flow	[m³/h]
k	=	k-factor	
Δp_w	=	differential pressure (of static pressure)	[Pa]
ρ_{20}	=	standard air density 1,2	[kg/m³]
$\rho_{oper.}$	=	air density operating point	[kg/m³]

This formula is valid for the following brands:

- **Ziehl Abegg SE**