

FLOW EQUATIONS

Each manufacturer has its own equation, K-factor range and unit of equation (see table below). By selecting the manufacturer from the menu, correct settings for each manufacturer will automatically be used.

Manufacturer of the fan	Equation	K-factor range	Unit of the equation
FläktWoods	$q = \frac{1}{k} \cdot \sqrt{\Delta P}$	0.3...99	m³/s
Rosenberg	$q = k \cdot \sqrt{\frac{2 \cdot \Delta P}{\rho}}$	37...800	m³/h
Nicotra-Gebhardt	$q = k^* \cdot \sqrt{\frac{2 \cdot \Delta P}{\rho}}$	50...4700	m³/h
Comefri	$q = k \cdot \sqrt{\frac{2 \cdot \Delta P}{\rho}}$	10...2000	m³/h
Ziehl	$q = k \cdot \sqrt{\Delta P}$	10...1500	m³/h
ebm-papst	$q = k \cdot \sqrt{\Delta P}$	10...1500	m³/h
Gebhardt	$q = k \cdot \sqrt{\frac{2 \cdot \Delta P}{\rho}}$	50...4700	m³/h
Nicotra	$q = k \cdot \sqrt{\Delta P}$	50...5300	m³/h
Common probe (e.g. FloXact)	$q = k \cdot \sqrt{\Delta P}$	0,001...9999,000	m³/h

q = air flow | k = k-factor | ΔP = differential pressure | ρ = air density

* k= C*sqrt(1.2/ρ)
ρ = air density [kg·m3] (1.2 at 20°C, 50% r.h. and 1013.2 hPa)