

V-Cone Flow Meter Flow Formulas

Bending Magnet # 18

Base Formula : $Q_{gpm} = 5.6748766 D^2 \beta^2 C_d (\Delta P)^{1/2} / (1-\beta^4)^{1/2}$

Component Formula	Meter I.D. (D)	Beta Ratio (β)	Discharge Coeff (Cd)	
FM1-F	0.438"	0.731	0.7560	$Q_{gpm} = 0.52032(\Delta P)^{1/2}$
BPM1-F	0.438"	0.532	0.8160	$Q_{gpm} = 0.26215(\Delta P)^{1/2}$
FM2/PS1-F	0.438"	0.731	0.7625	$Q_{gpm} = 0.52480(\Delta P)^{1/2}$
BPM2-F	0.438"	0.532	0.8243	$Q_{gpm} = 0.26482(\Delta P)^{1/2}$
FM3/PS2-F	0.438"	0.731	0.7659 0.7568	$Q_{gpm} = 0.52714(\Delta P)^{1/2}$ 0.52087
BeW-F	0.438"	0.731	0.7627 0.7557	$Q_{gpm} = 0.52493(\Delta P)^{1/2}$ 0.52012