

V-Cone Flow Meter Flow Formulas

Bending Magnet # 9

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	0.7477	$Q_{gpm} = 0.51461(\Delta P)^{1/2}$
BPM1-F	0.438"	0.532	0.8213	$Q_{gpm} = 0.26385(\Delta P)^{1/2}$
FM2/PS1-F	0.438"	0.731	0.7534	$Q_{gpm} = 0.51853(\Delta P)^{1/2}$
BPM2-F	0.438"	0.532	0.8241	$Q_{gpm} = 0.26475(\Delta P)^{1/2}$
M3/PS2-F	0.438"	0.731	0.7738	$Q_{gpm} = 0.53257(\Delta P)^{1/2}$
BeW-F	0.438"	0.731	0.7689	$Q_{gpm} = 0.52920(\Delta P)^{1/2}$