

V-Cone Flow Meter Flow Formulas

Bending Magnet # 15

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

Component Formula	Meter I.D. (D)	Beta Ratio (β)	Discharge Coeff (Cd)	
FM1-F	0.438"	0.731	0.7765 0.7723	$Q_{gpm} = \frac{0.53443(\Delta P)^{1/2}}{0.53154}$
BPM1-F	0.438"	0.532	0.8249	$Q_{gpm} = 0.26501(\Delta P)^{1/2}$
FM2/PS1-F	0.438"	0.731	0.7659	$Q_{gpm} = 0.52714(\Delta P)^{1/2}$
BPM2-F	0.438"	0.532	0.8224	$Q_{gpm} = 0.26421(\Delta P)^{1/2}$
M3/PS2-F	0.438"	0.731	0.7694	$Q_{gpm} = 0.52955(\Delta P)^{1/2}$
BeW-F	0.438"	0.731	0.7605	$Q_{gpm} = 0.52342(\Delta P)^{1/2}$