

V-Cone Flow Meter Flow Formulas

Insertion Device # 12

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

Component	Meter I.D. (D)	Beta Ratio (β)	Discharge Coeff (Cd)	Formula
BPM1-F	0.438"	0.532	0.8244	$Q_{gpm} = 0.26485(\Delta P)^{1/2}$
FM1-F	0.656"	0.769	0.7829	$Q_{gpm} = 1.40206(\Delta P)^{1/2}$
PS1-F	0.656"	0.701	0.8144	$Q_{gpm} = 1.12215(\Delta P)^{1/2}$
BPM2-F	0.438"	0.532	0.8098	$Q_{gpm} = 0.26016(\Delta P)^{1/2}$
FM2-F	0.656"	0.769	0.8011	$Q_{gpm} = 1.43466(\Delta P)^{1/2}$
PS2-F	0.656"	0.701	0.8122	$Q_{gpm} = 1.11912(\Delta P)^{1/2}$