

V-Cone Flow Meter Flow Formulas

Insertion Device # 2

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

Component	Meter I.D. (D)	Beta Ratio (β)	Discharge Coeff (Cd)	Formula
BPM1-F	0.438	0.532	0.8287	$Q_{\text{gpm}} = 0.26623(\Delta P)^{1/2}$
FM1-F	0.656	0.769	0.8110	$Q_{\text{gpm}} = 1.11747(\Delta P)^{1/2}$
PS1-F	0.656	0.701	0.8143	$Q_{\text{gpm}} = 1.12201(\Delta P)^{1/2}$
BPM2-F	0.438"	0.532	0.8358	$Q_{\text{gpm}} = 0.26851(\Delta P)^{1/2}$
FM2-F	0.656"	0.769	0.7760	$Q_{\text{gpm}} = 1.38971(\Delta P)^{1/2}$
PS2-F	0.656"	0.701	0.8082	$Q_{\text{gpm}} = 1.11361(\Delta P)^{1/2}$