

# V-Cone Flow Meter Flow Formulas

## Insertion Device # 18

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 (B)	Discharge Coeff (Cd)	Formula
BPM1-F	0.438	0.532	0.8188	$Q_{\text{gpm}} = 0.26305(\Delta P)^{1/2}$
FM1-F	0.656	0.769	0.7793	$Q_{\text{gpm}} = 1.39562(\Delta P)^{1/2}$
PS1-F	0.656	0.701	0.8010	$Q_{\text{gpm}} = 1.10369(\Delta P)^{1/2}$
BPM2-F	0.438"	0.532	0.8219	$Q_{\text{gpm}} = 0.26404(\Delta P)^{1/2}$
FM2-F	0.656"	0.769	0.7909	$Q_{\text{gpm}} = 1.41639(\Delta P)^{1/2}$
PS2-F	0.656"	0.701	0.8101	$Q_{\text{gpm}} = 1.11623(\Delta P)^{1/2}$