

# V-Cone Flow Meter Flow Formulas

## Bending Magnet # 34

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

<b>Component Formula</b>	<b>Meter I.D. (D)</b>	<b>Beta Ratio (β)</b>	<b>Discharge Coeff (Cd)</b>	
FM1-F	0.438"	0.731	0.7536	$Q_{gpm} = 0.51867(\Delta P)^{1/2}$
BPM1-F	0.438"	0.532	0.8196	$Q_{gpm} = 0.26331(\Delta P)^{1/2}$
FM2/PS1-F	0.438"	0.731	0.7631	$Q_{gpm} = 0.52521(\Delta P)^{1/2}$
BPM2-F	0.438"	0.532	0.8113	$Q_{gpm} = 0.26064(\Delta P)^{1/2}$
FM3/PS2-F	0.438"	0.731	0.7667	$Q_{gpm} = 0.52769(\Delta P)^{1/2}$
BeW-F	0.438"	0.731	0.7574	$Q_{gpm} = 0.52129(\Delta P)^{1/2}$