

# V-Cone Flow Meter Flow Formulas

## Bending Magnet # 3

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

<b>Component</b>	<b>Meter I.D. (D)</b>	<b>Beta Ratio (β)</b>	<b>Discharge Coeff (Cd)</b>	<b>Formula</b>
FM1-F	0.438"	0.731	0.7549	$Q_{gpm} = 0.519565(\Delta P)^{1/2}$
BPM1-F	0.438"	0.532	0.8211	$Q_{gpm} = 0.26379(\Delta P)^{1/2}$
FM2/PS1-F	0.438"	0.731	0.7656	$Q_{gpm} = 0.52693(\Delta P)^{1/2}$
BPM2-F	0.438"	0.532	0.8240	$Q_{gpm} = 0.26472(\Delta P)^{1/2}$
FM3/PS2-F	0.438"	0.731	0.7648	$Q_{gpm} = 0.52638(\Delta P)^{1/2}$
BeW-F	0.438"	0.731	0.7684	$Q_{gpm} = 0.52886(\Delta P)^{1/2}$