

V-Cone Flow Meter Flow Formulas

Bending Magnet # 33

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

Component Formula	Meter I.D. (D)	Beta Ratio (β)	Discharge Coeff (Cd)	
FM1-F	0.438"	0.731	0.7699	$Q_{gpm} = 0.52989(\Delta P)^{1/2}$
BPM1-F	0.438"	0.532	0.8258	$Q_{gpm} = 0.26530(\Delta P)^{1/2}$
FM2/PS1-F	0.438"	0.731	0.7596	$Q_{gpm} = 0.52280(\Delta P)^{1/2}$
BPM2-F	0.438"	0.532	0.8244	$Q_{gpm} = 0.26485(\Delta P)^{1/2}$
FM3/PS2-F	0.438"	0.731	0.7659	$Q_{gpm} = 0.52714(\Delta P)^{1/2}$
BeW-F	0.438"	0.731	0.7627	$Q_{gpm} = 0.52493(\Delta P)^{1/2}$