

## Formulas

$$\text{GPM} = \frac{\text{ID}^2 \times \text{feet/sec}}{0.4084967} \quad : \text{ to convert fluid velocity into a volumetric flow rate.}$$

$$\text{feet/sec} = \frac{\text{GPM} \times 0.4084967}{\text{ID}^2} \quad : \text{ to convert fluid velocity into a volumetric flow rate.}$$

K-Factor = Pulses per unit measure

$$\text{Conductivity } (\mu\text{S}) = \frac{\text{Cell Constant}}{\text{Resistance in ohms}}$$

$$Q = C_v \times \left[ \frac{P_1 - P_2}{\text{S.G.}} \right]^{1/2}$$

## Diameter Sizes

(in.)	(mm)
0.5	d20/DN15
0.75	d25/DN20
1	d32/DN25
1.25	d40/DN32
1.5	d50/DN40
2	d63/DN50
2.5	d75/DN65
3	d90/DN80
4	d110/DN100
5	d140/DN125
6	d160/DN150
8	d225/DN200
10	d280/DN250
12	d315/DN300
14	d400/DN350
16	d450/DN400
18	d450/DN450

## Engineering Constants - Flow

Quantity	Equivalent Values
1 Gallon	128 fl. oz. (U.S.)
	231 cubic in.
	0.1336 cubic ft.
	0.00379 cubic meter
	8.33 pounds
1 Imperial Gallon	1.2 US gallons
1 cubic Foot	7.48 US gallons
	0.0283 cubic meter
	0.2642 US gallon
1 Acre Foot	43,560 cubic feet
	325,853 US gallons

# Formulas and Conversions

## Engineering Constants - Unit Conversions

To Convert	Into	Multiply by
cm	inch	0.3938
cm <sup>2</sup>	square inch	0.155
inch	mm	25.4
cubic foot	m <sup>3</sup>	0.028317
Deg C	Deg F	C x 1.8+32
Deg F	Deg C	(F-32) x 0.5555
foot	m	0.3048
grams	ounce (Av.)	0.035274
grams	pound (Av.)	0.0022046
gallon (US)	liter	3.7854
gallon (US)/min	m <sup>3</sup> /h	0.227
gallon (US)/min	l/s	0.063
liter	gallon (US)	0.26418
m <sup>3</sup>	gallon (US)	264.18
mm Hg	pound (Av.)/square inch	0.0193368