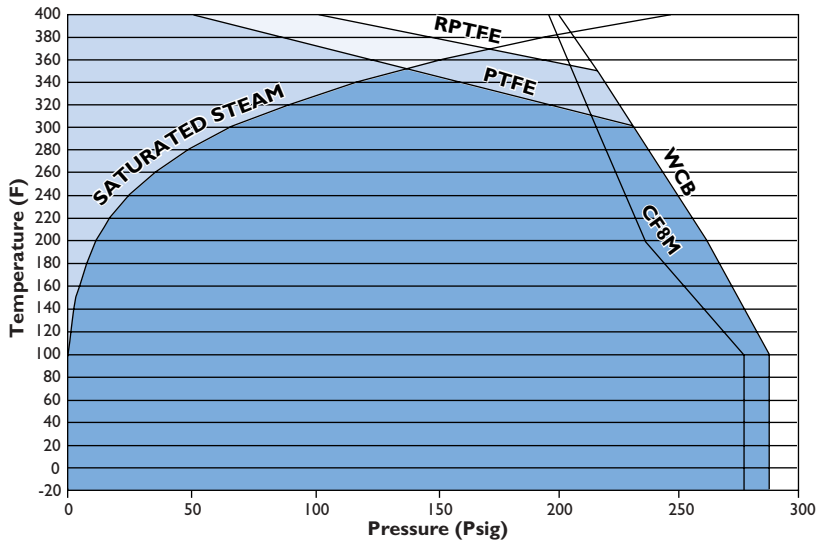


IFC BII50W/L Pressure Temperature Chart



CV Values (US-GPM @ 1 Psid)

Size in.	CV Rating
2 1/2"	90
3"	205
4"	403
6"	1075
8"	2243
10"	3885
12"	5925

Note: CV is defined as the volume of water in USGPM that will flow through a given restriction or valve opening with a pressure drop of one (1) psi at room temperature.

Method Of Calculating Flow

Liquid Flow

$$Q_L = C_v \sqrt{\frac{\Delta P}{g}}$$

Q_L = flow rate of liquid (gal./min.)
 ΔP = differential pressure across the valve (psi)
 g = specific gravity of liquid: water = 1.000

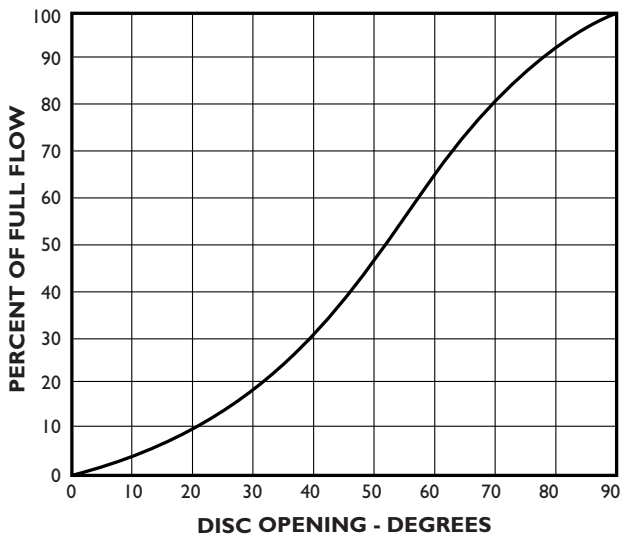
Gas Flow

For non-critical flow ($\frac{\Delta P}{P_2} < 1.0$)

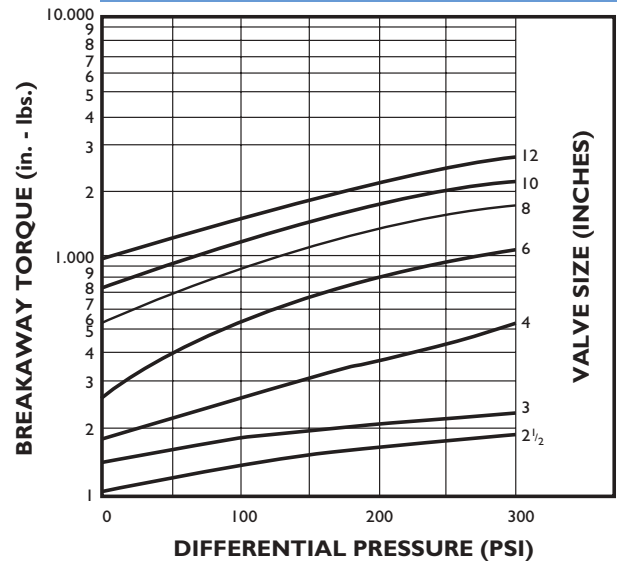
$$Q_g = 61 C_v \sqrt{\frac{P_2 \Delta P}{g}}$$

Q_g = flow rate of gas (CFH at STP)
 P_2 = outlet pressure (psia)
 g = specific gravity of gas: air = 1.000

Typical Flow Characteristic Curve



Valve Breakaway Torque (In. Lbs.)



- Notes:**
1. Selection of actuator torque output must meet or exceed the maximum torque required by the valve.
 2. Under certain conditions, hydrodynamic torque can exceed the breakaway torque and must be considered in selection of actuators.