May 18, 2009

2-1/2" MODEL E-1 SWING CHECK VALVE FRICTION LOSS CHART

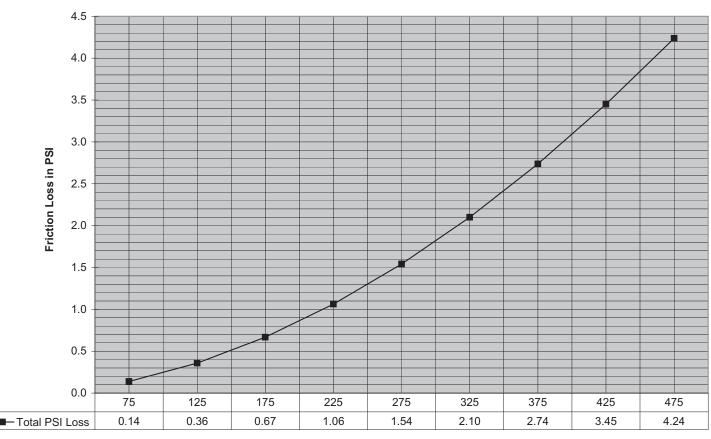
The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058 Telephone: 269-945-9501 Technical Services 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com

**TECHNICAL DATA** 

FOR USE WITH ENGLISH PRACTICAL SYSTEM Where Flow is Measured in GPM and Pressure is Measured in PSI

Graph is for reference purposes.

KING



Total PSI Loss

Flow in GPM (C = 120)

Friction Loss for the 2-1/2" Viking Model E-1 Swing Check Valve is equivalent to 6 feet of 2-1/2" Schedule 40 (id = 2.469") Pipe (C = 120).

To calculate friction loss for the 2-1/2" (id = 2.469") Viking Model E-1 Swing Check Valve at a specific flow, use the following formula:

$$\mathbf{P}_{\text{PSI}} = \left( \frac{4.52 \times Q^{1.85}}{C^{1.85} \times 2.469^{4.87}} \right) \times 6$$

Where P = Friction Loss (PSI)Q = Flow in GPMC = Constant (=120)