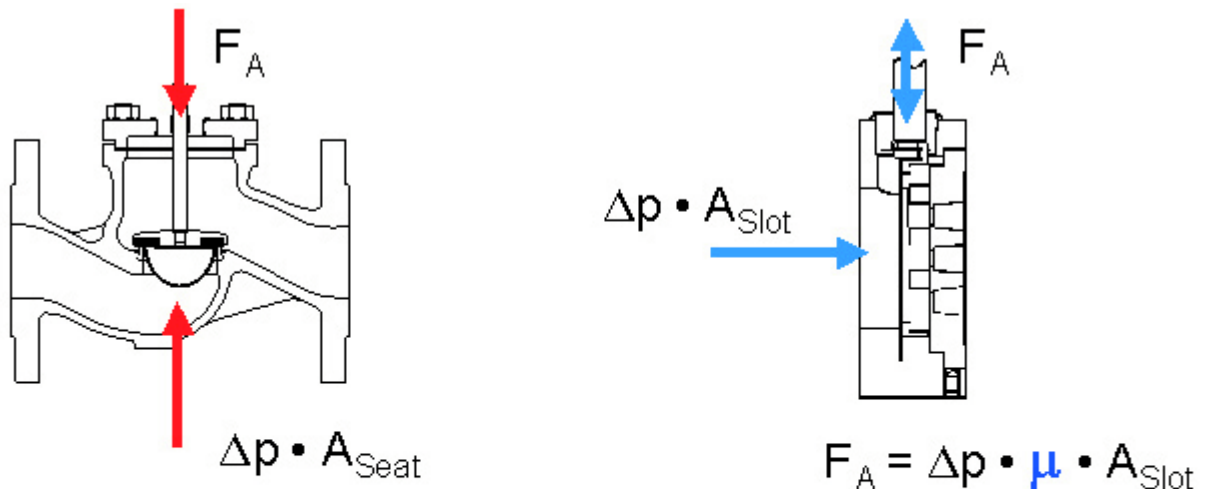


# The Sliding Gate Valve

- **Excellent rangeability:** High turndown in linear and equal percentage characteristics, providing stability and accurate flow during low flow conditions
- **Lightweight construction:** The simple seat design, short stroke and small actuator minimize weight and space requirements
- **Selectable Cv-Values:** Interchangeable function units allow easy change of flow capacity  
Ranges from Cv = 0.05 to 650
- **Tight shut-off:** Differential pressure forces the two discs together which with the self-lapping action and overlap in the closed position ensures a leakage rate  $<0.0001\%$  of  $C_{vs}$ -Value even at temperatures  $>395^{\circ}\text{F}$  ( $200^{\circ}\text{C}$ )  
Area seal instead of ring seal
- **High speed:** Fast response through short stroke  
E.g. 6" valve: 1/3 inch stroke
- **Quiet operation:** Flow streamed through multiple orifices minimizing turbulence, noise and erosion
- **Low energy consumption:** Due to short strokes and low actuation force required
- **Easy installation:** Wafer design and low weight (e.g. 6" valve with actuator: 31 lbs only) allow easy handling
- **Minimum wear:** Low turbulence means less erosion. Specially selected high grade materials for disc reduces wear
- **Maximum differential pressures:** Compact design with small actuators even at high differentials (up to 1450 psi)

The principle is both simple and elegant: with a sliding gate valve, the disc moves perpendicular to the flow and the actuator has only to overcome frictional forces, whereas with a conventional single seat globe valve, the actuator has to overcome the force from the differential pressure acting across the valve seat. (see picture below)



$$\frac{F_{a,GS \text{ Valve}}}{F_{a,Seat V..}} = \frac{\Delta p \cdot \mu \cdot A_{\text{Slot}}}{\Delta p \cdot A_{\text{Seat}}} \approx 0.1$$

With  $\mu = 0.25$

and  $\frac{A_{\text{Slot}}}{A_{\text{Seat}}} \approx 0.36$

The result is that 10 times less force is required to modulate a sliding gate valve than a single seat globe valve. Furthermore the pressure of the process medium against the moving disc assists the tight seal across the valve.

ANSI wafer design is available in CLASS 150, 300 and 600. DIN/BS flanges available as well.

**"The Sliding Gate Valve - for precise, fast-acting and economic control of liquids, steam and gases !!!"**