

GATE VALVES

PARALLEL SLIDE BOLTED BONNET



This type of on-off valve is an alternative to the traditional wedge type gate valves. The disc is in two halves, spring loaded, that seat on parallel seat rings. The disc “slides” in contact with the seats, hence the name. The advantages of this product versus the traditional wedge type product are:

- the disc never blocks in closed position (phenomenon that may occur with a wedge type that is closed with the line in temperature and opened when the line is cold).
- The opening/closing torque is much lower than a corresponding wedge type valve, resulting in less expensive actuation systems.
- The “sliding” feature keeps dirt away from the seating surface.

The double spring loaded disc has the tendency to trap working fluid in the body cavity when the valve is closed. This is avoided, when unidirectional functioning is allowed, by applying an equalizing hole on the upstream part of the disc.

Design codes and overall configuration, including stem-to-disc connection are the same than the wedge type gate valves. Materials range from carbon steel to low alloy steel, to austenitic stainless steel, to nickel alloys.

Materials are either to ASTM/ ASME standards or to EN standards, either harmonized or calculated to design conditions. Pressure classes (per ANSI standard) are normally ranging from 150# to 300# to 600#. Size range depends on pressure class requirements, FLUITEK ORSENIGO VALVES having no limits in relation to market requirements.



The table shows a typical example of gates class 600#. Sizes are indicated, but not limited to, for the most used range.

CHARACTERISTICS - ANSI 600#					
Nominal Size [inches]	Pressure Class	Bore diameter [mm]	End to end flanged [mm]	From center line to top [mm]	Total weight [Kg]
2"	600	51	292	444	32
3"	600	76	356	558	60
4"	600	102	432	665	107
6"	600	152	559	900	268
8"	600	203	660	1110	451
10"	600	254	787	1300	657
12"	600	305	838	1650	893
14"	600	337	889	1750	1252
16"	600	387	991	1900	1568
18"	600	438	1092	2020	1980
20"	600	489	1194	2172	2460
24"	600	591	1397	2650	3650