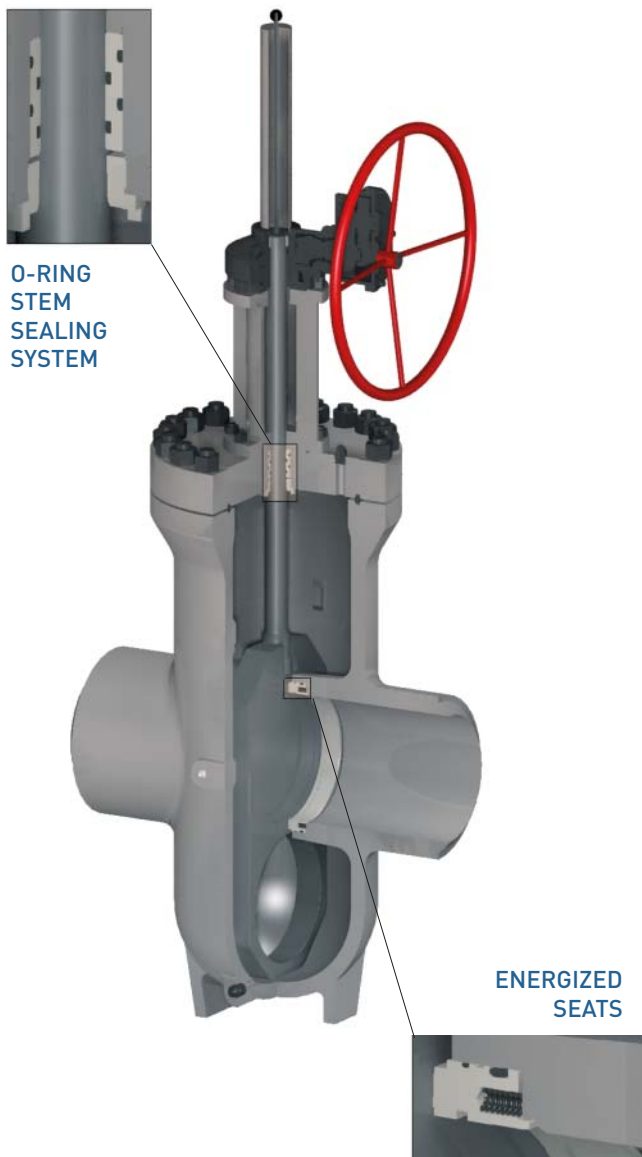


GATE VALVES

THROUGH CONDUIT BOLTED BONNET



Through conduit gate valves are an alternative to ball valves for transmission pipelines. The choice is very often based on past customer satisfaction, more than any technical consideration. FLUITEK ORSENIGO VALVES through conduit valves feature standard principles of this well known type of product. The disc is of slab type gate, seat rings are floating, energized by means of multiple springs, and the line fluid pressure pushes the upstream ring against the disc, thus assuring the sealing. The system allows the so called "self relieving" effect, i.e. any over-pressure acting in the body cavity is discharged in the line when force caused by the over-pressure on the seats exceeds the force provided by the springs. At the same time, the construction permits the double block and bleed functioning meaning that pressure applied contemporaneously upstream and downstream pushes both seats against the disc and opening the body cavity bleed relieves any pressure and fluid in the body cavity.

Standard construction is based on cast body, disc from plate or forging and all parts, particularly body cavity and disc, are precisely machined to control with high accuracy the parallelism and orthogonality of the parts. Two basic sealing systems are provided: soft seating and metal-to-metal seating. The first for gas and clean liquids service, the second for fluids containing solids or otherwise abrasive components. The soft seated construction is normally provided with secondary sealing system, i.e. with the ability of injecting a highly dense fluid (grease) into the seating area to help sealing mechanism in case of damage of the soft inserts.

A variety of materials are available: carbon steel, low temperature carbon steel, austenitic stainless steel, duplex and superduplex stainless steel and nickel alloys. Compliance with NACE MR-01-75 and NACE MR-01-03 is provided. Soft seated valves are provided with reinforced PTFE or Nylon inserts, depending on specific service and pressure class. Coatings include electroless nickel plating, nickel alloy overlays of seat pockets, tungsten carbide coating for metal-to-metal seated valves.

Standard of reference is API 6D full bore. Flanged and BW ends available. Construction with extension pups is also available, upon customer request. Stem sealing alternatives: o-rings, adjustable packing system, enclosed packing system with Chevron-type rings and lantern ring with grease injection fitting. Very often this type of valve is used in underground service and proper stem extensions are provided. Testing is per standard requirements, or per any supplementary test request by customers.



A typical example of dimensions and weights is reported for ANSI class 600#, one of the most frequently used. Classes range from 150# to 300#, 600#, 900#, 1500# and 2500#, all available by FLUITEK ORSENIGO VALVES.

CHARACTERISTICS - ANSI 600#

Nominal Size [inches]	Face to face [mm]		Border diameter [mm]	Connecting flange external diameter [mm]	From central axes to top flange [mm]	From central axes to bottom end [mm]	Total weight flanged [kg]
	Flange	BW					
2"	292	292	51	165	240	225	68
3"	356	356	77	210	320	265	150
4"	432	432	102	273	450	300	215
6"	559	556	152	356	620	385	295
8"	660	660	203	419	695	465	480
10"	787	787	254	510	855	545	700
12"	838	838	305	560	1005	625	950
14"	889	889	337	605	1095	675	1350
16"	991	991	387	685	1275	755	1780
18"	1092	1092	438	745	1580	835	2500
20"	1194	1194	489	815	1765	915	3100
22"	1296	1296	540	870	1950	995	4100
24"	1397	1397	591	940	2100	1075	5100
26"	1448	1448	635	1015	2145	1145	5600
28"	1549	1549	686	1075	2300	1230	6050
30"	1651	1651	736	1130	2445	1305	6950
32"	1778	1778	781	1195	2575	1380	7500
34"	1930	1930	832	1245	2725	1460	9800
36"	2083	2083	876	1315	2855	1530	11050
38"	2184	2184	926	1318	3010	1610	13600
40"	2337	2337	978	1320	3155	1690	15200
42"	2437	2437	1022	1405	3280	1760	17100
48"	2540	2540	1168	1595	3715	1990	24000