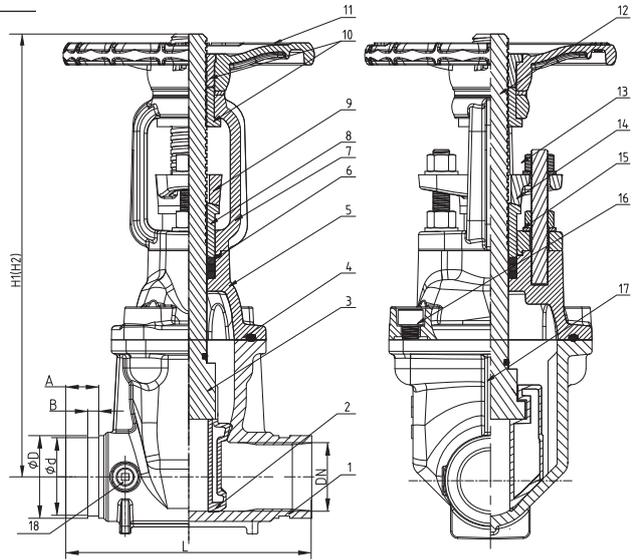


Outside Screw and Yoke (OS&Y) Gate Valve - Grooved

OSG

Technical Features

- **Sizes available (Nominal) :** 2"/DN50, 2½"/DN65, 3"/DN80, 4"/DN100, 5"/DN125, 6"/DN150, 8"/DN200, 10"/DN250 and 12"/DN300
- **Working pressure :** 21 bar (300 psi)
- **Seat Type:** Resilient wedge
- **Finish :** Fusion bonded epoxy coating internal and external
- **Connections :** Grooved metric or AWWA C606 standard
- **Specification :** Design and dimensions conform to AWWA C515
- **Features :** Pre-notched, stainless steel stem for easy attachment of supervisory switch
- **Note :** Size 5" is only UL listed



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Physical Data

Nominal Pipe Size		Pipe O.D.	Dimensions (mm)						Reference	Weight (kg)
Metric	inch	(mm)	L	H1 (Closed)	H1 (Open)	d	A	B		
DN50	2"	60.3	178	348	400	57.2	15.9	7.9	OSG-0200	11.4
DN65	2½"	73.0	190	373	440	69.1	15.9	7.9	OSG-0250-073	12.5
		76.1				OSG-0250-076				
DN80	3"	88.9	203	408	490	84.9	15.9	7.9	OSG-0300	16.9
DN100	4"	114.3	229	471	573	110.1	15.9	9.5	OSG-0400	24.2
DN125	5"	139.7	254	541	665	135.5	15.9	9.5	OSG-0500-139*	33.5
		141.3				137.0			OSG-0500-141*	
DN150	6"	165.1	267	601	755	160.9	15.9	9.5	OSG-0600-165	41.3
		168.3				164.0			OSG-0600-168	
DN200	8"	219.1	292	774	975	214.4	19.1	11.1	OSG-0800	73.7
DN250	10"	273.0	330	939	1193	268.3	19.1	12.7	OSG-1000	124.3
DN300	12"	323.9	356	1065	1370	318.3	19.1	12.7	OSG-1200	174.5

* UL Listed only

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Materials List

Item	Description	Material	Specification	Item	Description	Material	Specification
1	Valve Body	Ductile Iron	ASTM A536, 65-45-12	10	Stem Nut	Brass	HPb59-1
2	Wedge Disc	Ductile Iron	ASTM A536, 65-45-12 & EPDM	11	Handwheel	Ductile Iron	ASTM A536, 65-45-12
3	Stem	Stainless Steel	AISI 420	12	Washer	Brass	HPb59-1
4	Bonnet Gasket	EPDM	Commercial	13	Gland Nut	Carbon Steel	Zinc Plated
5	Bonnet	Ductile Iron	ASTM A536, 65-45-12	14	Stud	Carbon Steel	Zinc Plated
6	Washer	Brass	HPb59-1	15	Flat Washer	Carbon Steel	Zinc Plated
7	Yoke	Ductile Iron	ASTM A536, 65-45-12	16	Bolt	Carbon Steel	Zinc Plated
8	Stem Bushing	Brass	HPb59-1	17	O-Ring	EPDM	Commercial
9	Gland	Ductile Iron	ASTM A536, 65-45-12	18	Plug	Bronze	ASTM B583 C89833

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Installation

1. Piping systems and valves should be thoroughly cleaned and free from ingress of foreign materials.
2. Visually inspect the valve seating and ports for cleanliness immediately prior to installation.
3. All valves should be independently supported against movement and stress from the connected piping system.
4. Ensure that the valve pressure rating is compatible with service conditions.
5. Operate the valve at least once from the open to closed position.
6. Verify that packing nuts are tight before pressurizing the system.
7. Gate valves are not suitable for throttling applications.
8. Gate valves should be installed in the vertical position on horizontal pipework and in the horizontal position on vertical pipework.

Inspection and Maintenance

1. Valves should be inspected periodically and should be cycled to prevent buildup of foreign materials in the piping system and valve body.
2. In the event of a packing leak adjust the packing nuts to increase pressure on the stem packing. Packing nuts should be tightening evenly approximately a quarter turn in a clockwise direction.
3. Always shut down the system before repacking the valve. Valves are designed with backseats for repacking under pressure but this is not recommended.

Operation

Gate valves are manually operated multi-turn valves and are opened by a handwheel or other operating device, generally in a counter clockwise direction and then closed clockwise.

Closing Torque for Gate Valve Handwheel		
Size		Closing Torque Nm
2"	DN50	27
2½"	DN65	38
3"	DN80	71
4"	DN100	102
5"	DN125	122
6"	DN150	149
8"	DN200	203
10"	DN250	251
12"	DN300	305

