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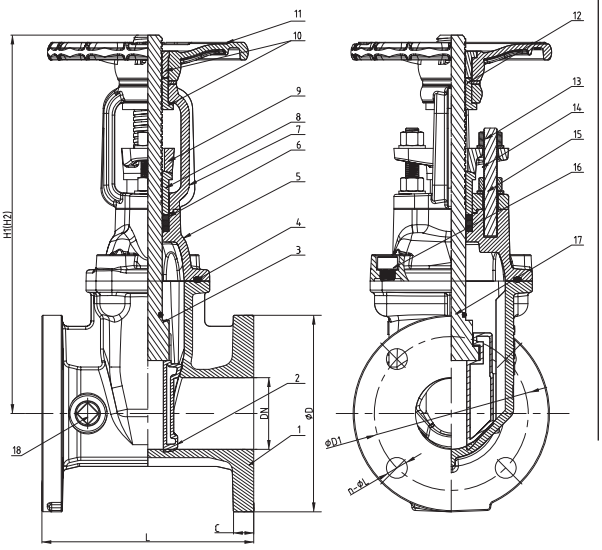
Outside Screw and Yoke (OS&Y) Gate Valve - Flanged

OSF

Control Valves

Technical Features

- **Sizes available (Nominal)** : 2"/DN50, 2½"/DN65, 3"/DN80, 4"/DN100, 5"/DN125, 6"/DN150, 8"/DN200, 10"/DN250 and 12"/DN300
- **Pressure data** : Working pressure : 300 psi (21 bar)
- **Seat type** : Resilient wedge
- **Finish** : Fusion bonded epoxy coated internal and external
- **Connections** : Flange diameter and thickness according to ANSI B16.1 Class 125, EN1092-2 PN10 or EN1092-2 PN16
- **Specifications** : 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		Dimensions (mm)											Reference*			Weight (kg)
inch	Metric	L	H1 (Closed)	H2 (Open)	D	C	D1			n-ØL			ANSI	PN10	PN16	
							ANSI	PN16	PN10	ANSI	PN16	PN10				
2"	**DN50**	178	348	400	152	16.0	120.7	125		4-Ø19.1			OSF-0200	OSF-0200PN		14.7
2½"	**DN65**	190	373	440	178	17.5	139.7	145		4-Ø19.1			OSF-0250	OSF-0250PN		17.7
3"	**DN80**	203	408	490	191	19.1	152.4	160		4-Ø19.1	8-Ø19.1		OSF-0300	OSF-0300PN		23.1
4"	**DN100**	229	471	573	229	19.1	190.5	180		8-Ø19.1	8-Ø19.1		OSF-0400	OSF-0400PN		31.6
5"	**DN125**	254	541	665	254	19.1	215.9	210		8-Ø22.2	8-Ø19.1		OSF-0500**	OSF-0500PN**		42.2
6"	**DN150**	267	601	755	279	19.1	241.3	240		8-Ø22.2	8-Ø23		OSF-0600			53.2
8"	**DN200**	292	774	975	343	22.2	298.5	295		8-Ø22.2	12-Ø23	8-Ø23	OSF-0800	OSF-0800PN10	OSF-0800PN16	91.3
10"	**DN250**	330	939	1193	406	23.8	362.0	355	350	12-Ø25.4	12-Ø28	12-Ø23	OSF-1000	OSF-1000PN10	OSF-1000PN16	134.6
12"	**DN300**	356	1065	1370	483	25.4	431.8	410	400	12-Ø25.4	12-Ø28	12-Ø23	OSF-1200	OSF-1200PN10	OSF-1200PN16	200.0

* Valve flange drilling (size and location of bolt holes and pitch circle diameter) allows mating with the following flange types :

ANSI = ANSI B16.1 Class 125 | PN10 = DIN 2501, BS 4504, EN 1092 - PN10 | PN16 = DIN 2501, BS 4504, EN 1092 - PN16

** 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	Bonet 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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OSF

Control Valves

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.

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

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.



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