

Gate Way Resilient Seated Gate Valves

- Fully compliant to BS EN 1074-2
- Lightweight design constructed in ductile iron
- Robust and durable
- Suitable for use in potable water systems and buried service
- Available ex-stock



Gate Way Resilient Seated Gate Valves

Main Features:

- Ductile iron construction provides high strength to weight ratio.
- Excellent corrosion resistance. Blue fusion bonded epoxy coating in accordance with BS EN 14901.
- Efficient operation after long periods of no-use in either open or closed positions.
- Full clear bore for optimum flow.
- Integral case feet offer ease of storage and installation.
- High tensile stainless steel stem ensures strength and corrosion resistance.
- Supplied with cap top as standard.



Options Available:

- Handwheel kits, which are available in both clockwise and anti-clockwise to close versions, please specify.
- Valves can be fitted with bevel gearbox.

Handwheel technical data and the number of turns required to open/close the valves

DN	50	80	100	150	200	250	300
AXA mm	17.3 x 17.3	17.3 x 17.3	17.3 x 17.3	19.3 x 19.3	24.3 x 24.3	27.3 x 27.3	27.3 x 27.3
B-ductile iron handwheel mm	220	220	220	300	300	350	350
Open Turns	6	8.5	10.5	15.5	17	21	22

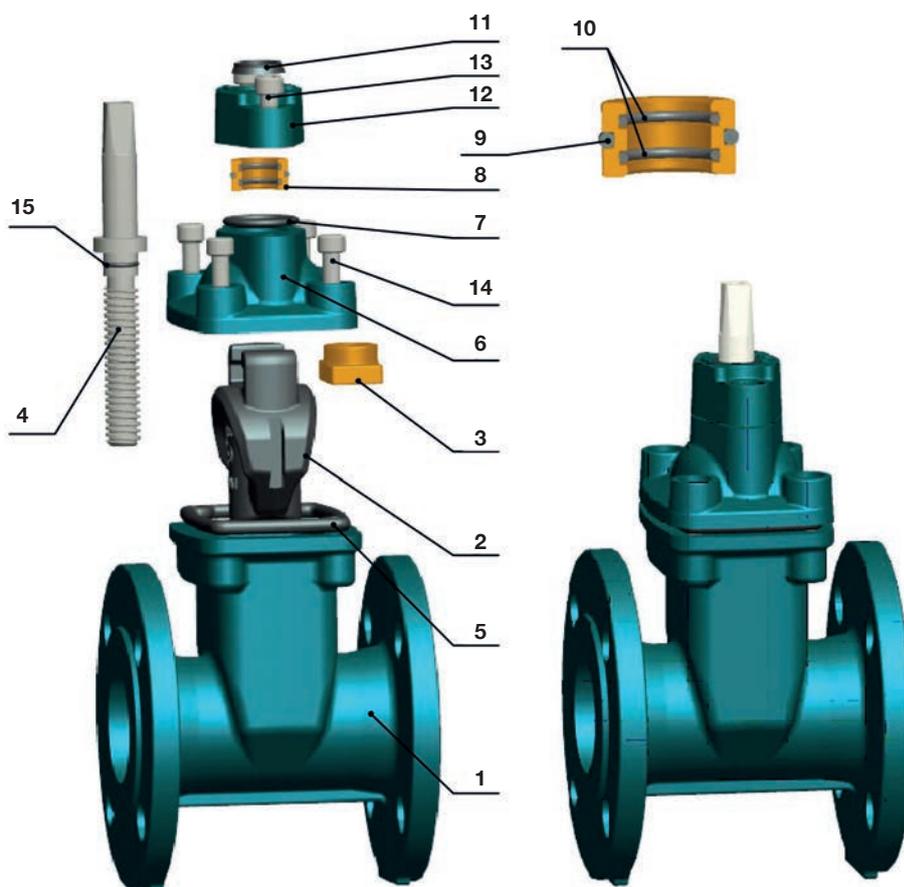
Technical Features:

Fully compliant to BS EN 1074-2 and BS 5163-1

Maximum operating temperature 50°C

DN 50 - DN 300 parts list

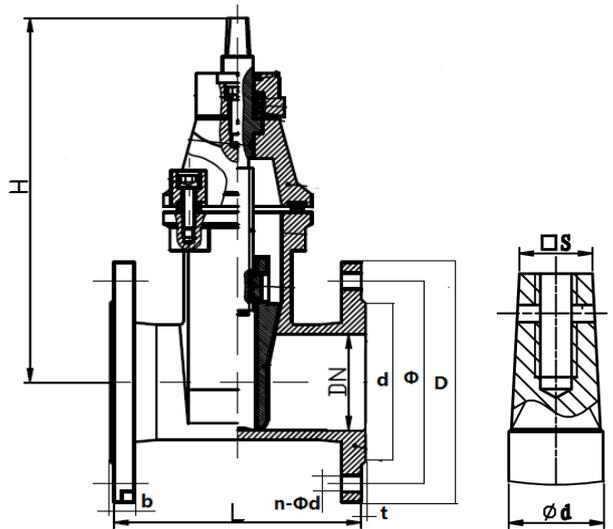
No.	Name	QTY	Material
1	Body	1	GGG50
2	Wedge	1	GGG50/EPDM
3	Stem Nut	1	CuA110Fe3
4	Stem	1	431
5	Sealing Gasket	1	EPDM
6	Cover	1	GGG50
7	O Ring III	1	EPDM
8	Sealing Sleeve	1	HPb59-1
9	O Ring I	1	EPDM
10	O Ring II	2	EPDM
11	Dust Proof Sealing Ring	1	EPDM
12	Gland	1	GGG50
13	Hexagon Bolt	2	Carbon Steel
14	Hexagon Bolt	M	Carbon Steel
15	O Ring IV	1	EPDM



BS5163 Valve key dimensions and weight

DN	L	PN	n-Φd	d	Φ	D	t	b	H1	Weight (kg)	Pallet (qty)
50	178	10	4-Φ19	99	125	165	3	19	218	9.9	20
		16									
80	203	10	8-Φ19	132	160	200	3	19	255	13.7	14
		16									
100	229	10	8-Φ19	156	180	220	3	19	300	18.2	12
		16									
150	267	10	8-Φ23	211	240	285	3	19	392	33.8	8
		16									
200	292	16	8-Φ23	266	295	340	3	20	485	57.5	6
			12-Φ23								
250	330	16	12-Φ23	319	350	400	3	22	585	82.5	4
			12-Φ28		355						
300	356	16	12-Φ23	370	400	460	4	24.5	655	116.5	3
			12-Φ28		410						

Dimensions in mm. Weight in kg. Flanges in accordance with BS EN 1092-2.



Marking on valve body

Side A	Side B
EN10742	Saint Gobain
BS5163-1	M-D-Y (date)
DNXXX	GJS
PN16	66

Fixed Flanged Joints:

- Ensure that the faces of the flanges are flat, clean and free from dirt or particles of foreign matter.
- Use only undamaged rust free bolts, nuts and washers. Lubricate the bolt threads and all mating surfaces of nuts, washes and flanges using a suitable lubricant (when used on pipes intended for use with potable water, the lubricant should have WRc approval. For use on pipes intended for use with sewage and waste water, an automotive oil or grease will be satisfactory).
- Location bolts may be inserted in the first four positions as shown in Fig. 2.11.1
- Use only 3mm thick, 80 IRHD hardness synthetic rubber gaskets to EN681-1 and with dimensions to suit the flange rating.
- Position the gasket in the location bolts.
- Offer the adjoining flange to bolts.
- Lightly tighten the four location bolts in the order as shown in Fig. 2.11.1 to secure the adjoining flange.
- Insert the remaining bolts and, using a torque wrench, tighten in the correct sequence (see Fig. 2.11.1). Where flanges have more bolts than shown follow the principle of tightening diametrically opposite bolts.
- Tighten gradually and ensure that a sufficient number of circuits are undertaken to achieve the specified bolt torque (see Fig. 2.11.1).
- Because of potential gasket creep, leave for one hour, check and, if necessary, re-tighten bolts. Repeat the checks until the bolts will not tighten any more.

For sizes having 12 bolts or more it is recommended that two jointers work simultaneously on diametrically opposite bolts. Each jointer tightens the first nut in the first quadrant, then the first nut in the second quadrant, returns to the second nut in the first quadrant and so on (see Fig. 2.11.2).

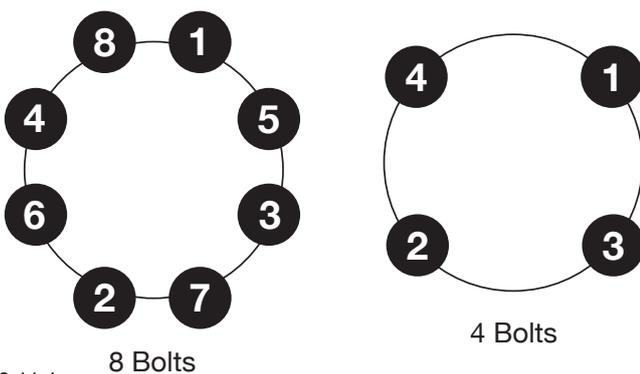


Fig. 2.11.1

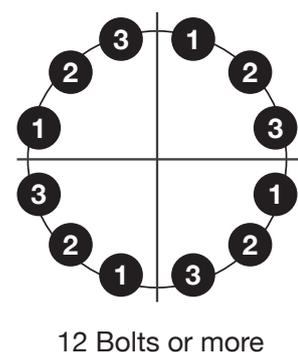


Fig. 2.11.2

Bolting Torque:

Table 2.5.1 indicates the approximate bolting torque required to seal flanged joints against internal pressure. Where the installation is such that high bending moments could be induced at these joints, please consult Technical Sales Department.

The relationship between applied torque and the actual load imparted by the bolts is not precisely predictable, therefore the values given in the charts are an approximate guide.

Nominal size DN	Approximate Bolting Torque in Nm for Fixed Flanges						
	PN 16 Flanged Joints				PN 10 Flange Joints		
	To seal at 10 bar	To seal at 16 bar	To seal at 20 bar	To seal at 25 bar	To seal at 5 bar	To seal at 10 bar	To seal at 16 bar
50	60	60	65	65	60	60	60
80	70	70	75	75	70	70	70
100	75	80	80	80	70	75	80
150	115	120	125	135	110	115	120
200	110	115	120	130	120	130	140
250	155	165	175	180	110	120	130
300	165	180	190	210	120	130	145

Table 2.5.1

NOTE: The need to seal a flanged joint at a pressure greater than the flange PN rating is only for site hydrostatic test purposes. Flanged joints should not be operated at these higher values.

On flanged joints using elastomeric gaskets some relaxation of the gasket will be experienced and it should be ascertained that the bolting torque required to effect a seal at the appropriate pressure, as shown in the charts, are effective at the time of pressure testing. Bolt torques do not have to be restricted to those applicable for a specific test pressure and higher torque can be applied up to the maximum rated test pressure of the appropriate flange.

NOTES: 1. Flange connection part according to EN1092-2 2. Face-to-Face length of valve according to BS5163 3. Valve test according to EN1074-2 4. Fusion bonded epoxy coatings and rubber parts conform to WRAS standards 5. ISO 9001:2008, ISO 14001:2004, BS OHSAS 18001:2007

HOTLINE

Technical help or on site support

0161 231 9140

info@hambakerpipelines.co.uk

Sales and Technical Support

Head Office

Scotland T: 0161 231 9145

NE & NW England T: 0161 231 9145

Wales & Midlands T: 0161 231 9143

SE & SW England T: 0161 231 9144

N. Ireland & R.O Ireland T: 0161 231 9143

Access Covers & Gratings T: 0161 231 9142

Hambaker Pipelines
18 Whitworth Street
Openshaw
Manchester
M11 2NJ
Tel: 0161 231 9140
Fax: 0161 231 9192