

# RESILIENT SEAT GATE VALVE

## DN80 - DN300

### MODEL: GVR2



## FEATURES AND BENEFITS

- Designed and tested in accordance with AS2638.2.
- AS2638.2 OceanaMark Certified product by IAPMO OCEANA Licence No: OMK32160 .
- WaterMark Approved product by IAPMO OCEANA Licence No: WM-032160 .
- Approved to AS4020.
- Valve sizing conforms to the Australian requirements of the Water Supply Code
- The Body and Bonnet are made of high grade ductile iron to AS1831.
- The complete wedge including internal bore is fully encapsulated (vulcanised) by rubber preventing creep and corrosion.
- The triple stem seal design provide superior sealing performance and reliability.
- Drop tight seal.
- Valves can be supplied in clockwise or anti-clockwise closing directions.
- Fusion bonded epoxy coating to AS4158 internally and externally providing longer life and excellent corrosion protection.
- Full bore ports avoid the ingress of debris

## OPTIONS

- Key Cap Operator (Standard)
- Hand wheel operator
- Extensions

Refer to GVR-ISO Data Sheet for...

- Electric actuator
- Gearbox operator
- ISO Top Flange (Option DN80-DN300)



## TECHNICAL SPECIFICATION

<b>Construction:</b>	Resilient Seated Gate
<b>Size:</b>	80mm - 300mm
<b>Pressure Rating:</b>	PN16
<b>Face to Face:</b>	According to AS2638.2
<b>Flange Drilling:</b>	AS4087 B5 AS2129 Table D AS2129 Table E
<b>Coatings:</b>	AS4158
<b>Temperature (Max):</b>	0-68°C (General Application) 0-40°C (AS4020 Compliance)
<b>Velocity (Max):</b>	4.5m/s
<b>Pressure Testing:</b>	According to AS2638.2
	- Body: 1.5 AOP
	- Seat: 1.1 AOP

## APPLICATIONS

Challenger Valves and Actuators are the **“Right Choice for Valves and Actuation”** when quality matters.

Servicing industries such as:

Water & Waste Water, Mining, Pumping, Industrial Processing, Irrigation, Materials Handling and General Industries.



AS2638.2 Lic OMK32160  
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AS2638.2 Lic WM-032160  
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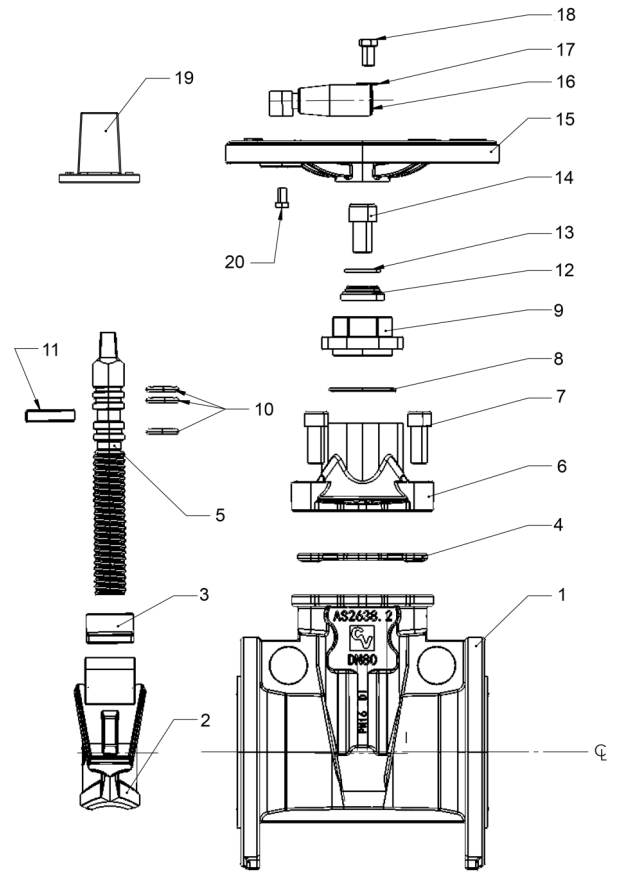
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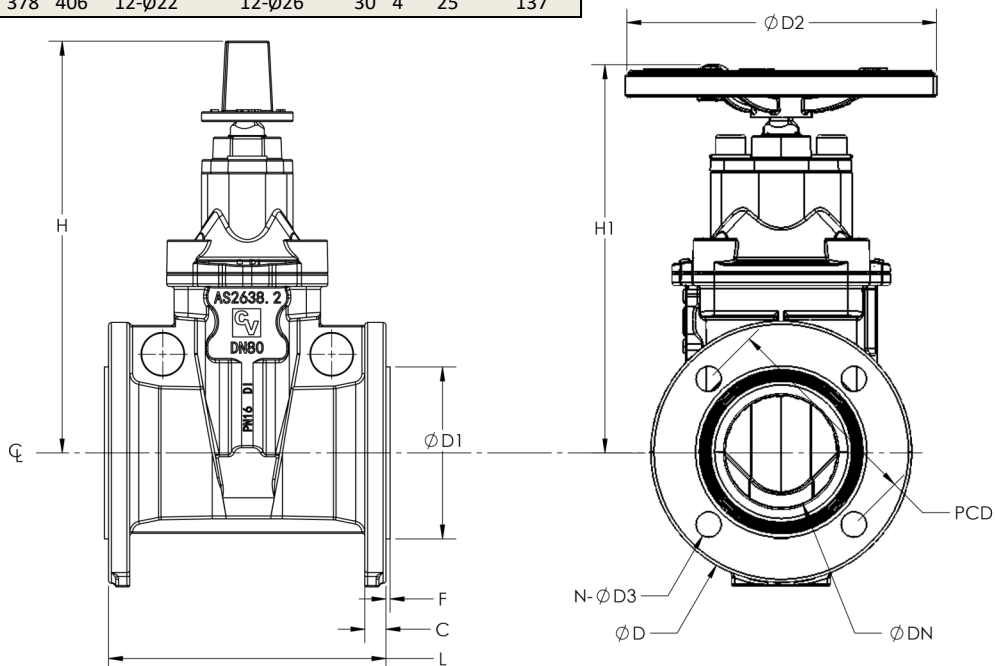
## PN16 DN80-DN300 VALVE MATERIALS

ITEM	COMPONENT	MATERIAL	STANDARD
1	Body	Ductile Iron, 450-10	AS1831
2	Wedge	Ductile Iron, 450-10, fully encapsulated with EPDM rubber	AS1831 AS1646 + AS681.1
3	Wedge Nut	Copper Alloy, C38600	AS1565
4	Gasket	Rubber EPDM	AS1646 + AS681.1
5	Stem	Stainless Steel, 431	ASTM A276
6	Bonnet	Ductile Iron, 450-10	AS1831
7	Hex Cylinder Head Screw	Stainless Steel, 316	ASTM A276
8	O-Ring	Rubber, EPDM	AS1646 + AS681.1
9	Stem Seal Gland	Stainless Steel	ASTM A351 CF8M
10	O-Ring	Rubber, EPDM	AS1646 + AS681.1
11	Thrust Collar	Copper Alloy	AS1565 C83600
12	Dust Collar	Rubber, EPDM	AS1646 + AS681.1
13	Washer	Stainless Steel, 316	ASTM A276
14	Hex Cylinder Head Screw	Stainless Steel, 316	ASTM A276
15	Handwheel	Ductile Iron, 450-10	AS1831
16	Hand Lever	Bakelite	AS1831
17	Washer	Stainless Steel, 316	ASTM A276
18	Bolt	Stainless Steel, 316	ASTM A276
19	Key Cap	Ductile Iron, 450-10	AS1831
20	Bolt	Stainless Steel, 316	ASTM A276



DIMENSIONS												
DN	L	H	H1	ØD	ØD1	PCD	n-ØD3		C	F	No. of Turns	Weight (Kg)
							AS4087 B5	AS2129 Table E				
80	203	297	274	185	122	146	4-Ø18	4-Ø18	18	3	16	20
100	229	332	309	215	154	178	4-Ø18	8-Ø18	20	3	20	22
150	267	438	403	280	211	235	8-Ø18	8-Ø22	23	3	30	38
200	292	528	518	335	268	292	8-Ø18	8-Ø22	23	3	16.7	60
225	305	622	613	370	300	324	8-Ø18	N/A	24	3	20.8	79
250	330	622	613	405	328	356	8-Ø22	12-Ø22	24	3	20.8	90
300	356	699	713	455	378	406	12-Ø22	12-Ø26	30	4	25	137

### Handwheel Optional



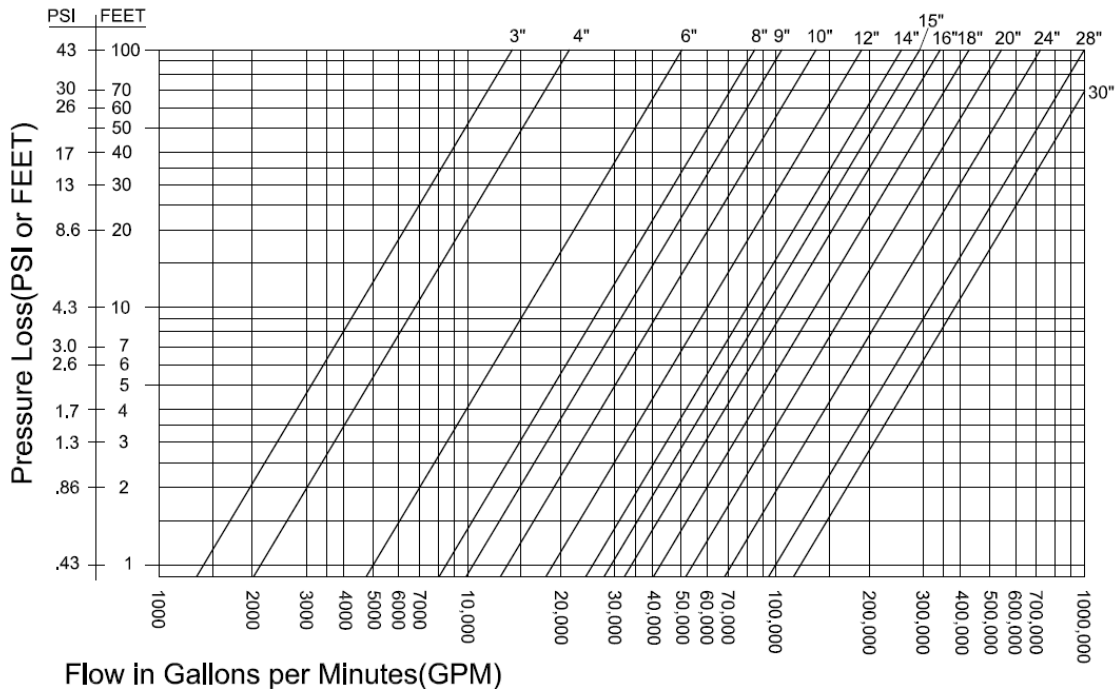
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## PRESSURE DROP



## FLOW RATES

Cv is defined as the volume of water in U.S.G.P.M that will flow through a given restriction or valve opening with a pressure drop of one (1) p.s.i at room temperature.

FLOW VALUES		
Size	CV	KV
80	2110	1808
100	3298	2826
150	7420	6358.5
200	13192	11304
225	16696	14307
250	20613	17663
300	29681	25434

## TECHNICAL : CODE BUILDER

HOW TO ORDER							
SERIES	CLOSING DIRECTION	CONNECTIONS	RATING	SIZE	SIZE	SIZE	OPERATOR
GVR2	C	D	4	0100			K
Example: DN100 GR Resilient Seated Gate Valve, Clockwise Closing, Flanged AS4087 B5, PN16 Rating, Key Cap Operation							
Series:	<u>CLOSING DIRECTION</u>	<u>CONNECTIONS</u>	<u>RATING</u>	<u>SIZE</u>	<u>SIZE</u>	<u>SIZE</u>	<u>OPERATOR</u>
GVR2	A = ACC	D = AS4087 B5 - PN16	4 = PN16	0080 = 3" (80mm)	0100 = 4" (100mm)	0150 = 6" (150mm)	H = Hand Wheel
	C = CC	E = AS2129 TABLE E - PN16		0200 = 8" (200mm)	0225 = 9" (225mm)	0250 = 10" (250mm)	K = Key cap operator
				0300 = 12" (300mm)			

Contact Challenger for alternative operators (Eg; Bevel gear box, Spur Gear Box, Electric Actuator) and flange drilling. When extension spindles are required please specify the required part number as per the code builder on the relevant data sheet. Visit the Challenger website to access further data sheets.