



# Section 17

# Gate Valves

The wedge gate valve provides uninterrupted passage for the flow of fluid. Body ends are inline and gate is moved between body seats by a spindle, whose axis is at right angles to that of the body ends. It may be either inside screw, in which the actuating thread of the spindle is contained inside the valve and thus in contact with the line fluid, or outside screw, in which the actuating thread of the spindle is exterior to the bonnet. The valve is used extensively where a straight flow is required with minimum pressure drop. It is not recommended for flow regulation and should only be used fully opened or closed.





## [17] GATE VALVES

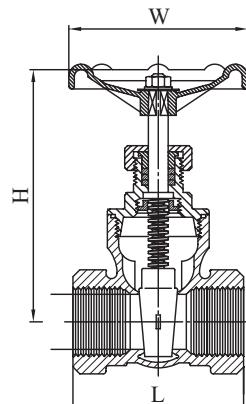
### Bronze Screwed Gate Valve



Material List	
PART	MATERIAL
Body	Bronze
Bonnet	Bronze
Wedge	Bronze
Stem	Bronze
Hand Wheel	Ductile Iron

Specifications	
Thread	ISO 228
MAX Working Temperature	180°C
Cold Working Pressure	1600kPa

Applications - Water, Oil, Gas, Irrigation



Bronze Screwed Gate Valve TM-107					
AAP CODE	IMPERIAL SIZE	L	H	W	APPROX. KG/PC
VBZG15	1/2	43	85	50	0.27
VBZG20	3/4	48	100	50	0.39
VBZG25	1	57	120	58	0.53
VBZG32	1 1/4	63	145	77	0.71
VBZG40	1 1/2	65	155	77	0.89
VBZG50	2	78	190	97	1.27
VBZG80	3	96	260	108	2.4

### Bronze Shouldered Gate Valve (T - Lever)

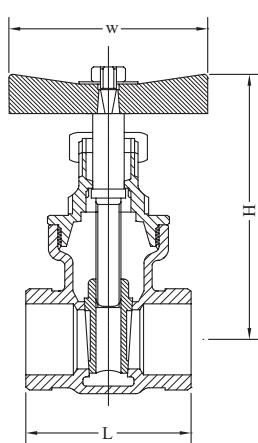


Material List	
PART	MATERIAL
Body	Bronze
Bonnet	Bronze
Wedge	Bronze (EPDM capsulated)
Stem	Bronze

Specifications	
MAX Working Temperature	120°C
Cold Working Pressure	1200kPa

Applications - Water, Oil, Gas, Irrigation

Bronze Shouldered Gate Valve (T - Lever)					
AAP CODE	IMPERIAL SIZE	H	L	W	APPROX. KG/PC
VBZG50S	2	102.5	176	104	2.5



## Resilient Seat Gate Valves

Certified to AS/NZS:2638:2011

AAP Standards Mark License - SMKP20171.4

This license covers DN80-DN600 valves

Certified to AS4020 - Suitable for contact with drinking water

WSAA Product Appraisal Report 11/26

Sydney Water Approval - No. 200808

Yarra Valley Water Authorisation - Ref. YVW 12/11

City West Water CWW 12/596

South East Water SEW 12/0117

Hunter Water Corporation HWC 2012-35/49/1

Material List	
PART	MATERIAL
Body	Ductile Iron (epoxy resin coating)
Bonnet	Ductile Iron (epoxy resin coating)
Wedge	Ductile Iron (bonded Rubber)
Stem	431 Stainless Steel
O'Ring	EPDM
Seal Bushing	EPDM

Specifications	
MAX Working Temperature	40°C
Cold Working Pressure	1600kPa
Design	AS2638.2*
Flange Drilling T/C	AS4087
Flange Drilling T/E	AS2129
Socket Ends	AS 2280
Coating Thickness	AS4158

N.B DN50 and DN65 are not covered by AS2638.2

Applications - Water, sewage and neutral liquid applications

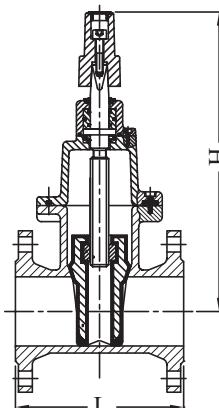
"The Valves are distinguished by White cap for Anticlockwise and Red cap for Clockwise"

For buried applications is recommended installation comply with Australian Standard - AS/NZS 2566.2

### Resilient Seat Gate Valve Clockwise Table C

Resilient Seat Gate Valve Clockwise Table C							
AAP CODE	IMPERIAL SIZE	L	H	HOLE DIAMETER	NO. HOLES	APPROX. KG/PC	
WITH SPINDLE CAP							
VRSCL50C*	2	175	308	18	4	11.5	
VRSCL65C*	2 1/2	190	318	18	4	13.5	
VRSCL80C	3	203	358	18	4	15	
VRSCL100C	4	229	386	18	4	26	
VRSCL150C	6	267	406	18	8	48	
VRSCL200C	8	292	634	18	8	77	
VRSCL250C	10	330	724	22	8	112	
VRSCL300C	12	356	834	22	12	163	
VRSCL350C	VRSCL350C-GO	14	381	960	26	12	258
VRSCL400C	VRSCL400C-GO	16	406	1103	26	12	330
VRSCL450C	VRSCL450C-GO	18	432	1173	26	12	408
VRSCL600C	VRSCL600C-GO	24	508	1440	30	16	660

\* Not Certified

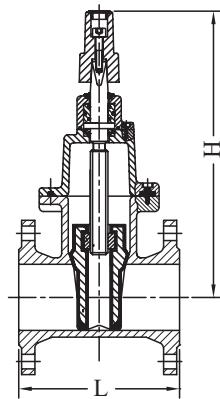


## [17] GATE VALVES

### Resilient Seat Gate Valve Clockwise Table E



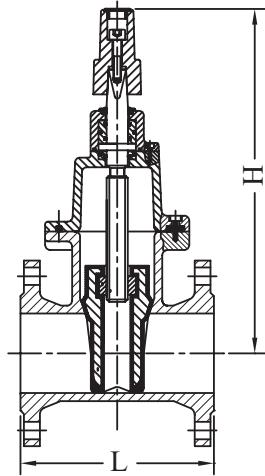
Resilient Seat Gate Valve Clockwise Table E						
AAP CODE	IMPERIAL SIZE	L	H	HOLE DIAMETER	NO. HOLES	APPROX KG/PC
VRSCC100E	4	229	386	18	8	26
VRSCC150E	6	267	406	22	8	48
VRSCC200E	8	292	634	22	8	77
VRSCC250E	10	330	724	22	12	112
VRSCC300E	12	356	834	26	12	163



### Resilient Seat Gate Valve Anti-Clockwise Table C



Resilient Seat Gate Valve Anti-Clockwise Table C							
AAP CODE		IMPERIAL SIZE	L	H	HOLE DIAMETER	NO. HOLES	APPROX. KG/PC
WITH SPINDLE CAP	WITH GEAR-OP						
VRSACC80C		3	203	358	18	4	15
VRSACC100C		4	229	386	18	4	26
VRSACC150C		6	267	406	18	8	48
VRSACC200C		8	292	634	18	8	77
VRSACC225C		9	305	660	18	8	99
VRSACC250C		10	330	724	22	8	112
VRSACC300C		12	356	834	22	12	163
VRSACC375C		15	381	1093	26	12	303
VRSACC450C	VRSACC450C-GO	18	432	1173	26	12	408
VRSACC600C	VRSACC600C-GO	24	508	1440	30	16	660

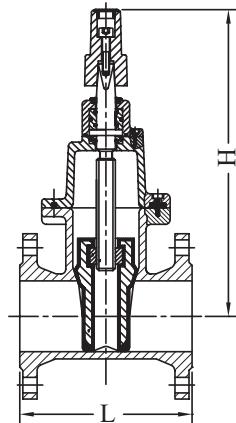


\* Not Certified



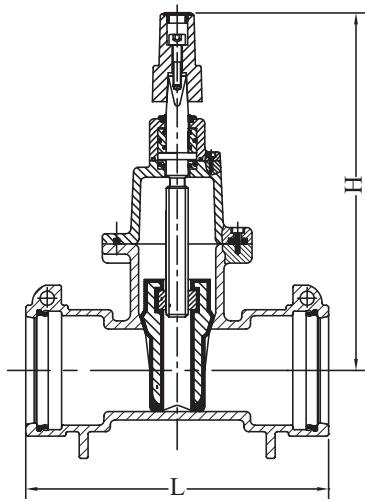
## Resilient Seat Gate Valve Anti-Clockwise Table E

Resilient Seat Gate Valve Anti-Clockwise Table E						
AAP CODE	IMPERIAL SIZE	L	H	HOLE DIAMETER	NO. HOLES	APPROX KG/PC
VRSACC100E	4	229	386	18	8	26
VRSACC150E	6	267	406	22	8	48
VRSACC200E	8	292	634	22	8	77
VRSACC250E	10	330	724	22	12	112
VRSACC300E	12	356	834	26	12	163



## Resilient Seat Socket End Gate Valve Anti-Clockwise

Resilient Seat Gate Valve Anti-Clockwise Socket End				
AAP CODE	IMPERIAL SIZE	L	H	APPROX. KG/PC
VRSACC100SOC	4	340	391	27
VRSACC150SOC	6	373	506	49
VRSACC200SOC	8	460	622	85
VRSACC225SOC	9	305	660	112
VRSACC250SOC	10	482	726	120
VRSACC300SOC	12	520	839	180

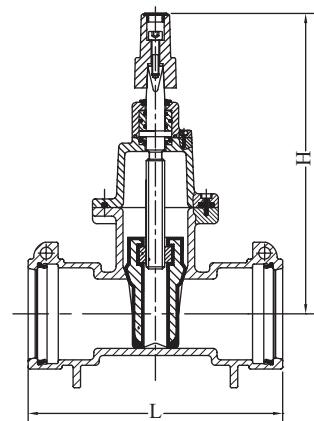


## [17] GATE VALVES

### Resilient Seat Socket End Gate Valve Clockwise



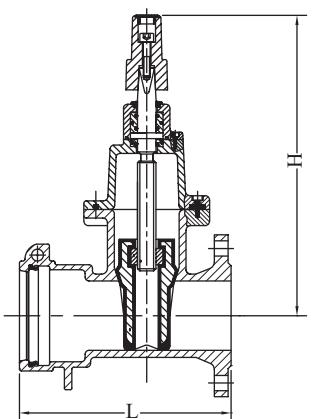
Resilient Seat Gate Valve Clockwise Socket End				
AAP CODE	IMPERIAL SIZE	L	H	APPROX. KG/PC
VRSCC100SOC	4	340	391	27
VRSCC150SOC	6	373	506	49
VRSCC200SOC	8	460	622	85
VRSCC225SOC	9	305	660	112
VRSCC250SOC	10	482	726	120
VRSCC300SOC	12	520	839	180



### Resilient Seat Gate Valve Anti-Clockwise Table C / Socket End

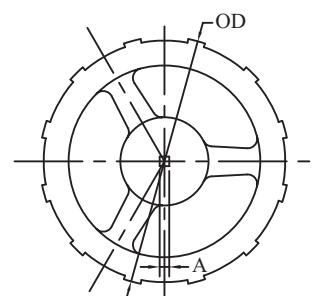


Resilient Seat Gate Valve Anti-Clockwise Table C / Socket End						
AAP CODE	IMPERIAL SIZE	L	H	HOLE DIAMETER	NO. HOLES	APPROX KG/PC
VRSACC80C/S	3	271	362	18	4	15
VRSACC100C/S	4	284.5	391	18	4	27
VRSACC150C/S	6	320	506	18	8	50



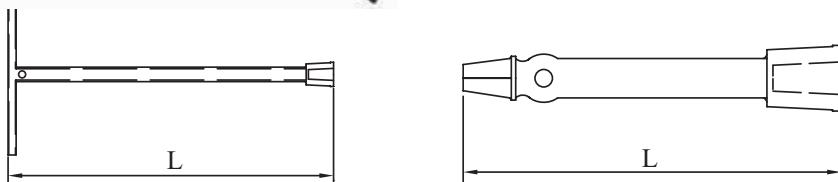
## Handle to Suit Resilient Seat Gate Valves

Handle to Suit Resilient Seat Gate Valve					
AAP CODE		IMPERIAL SIZE	A	OD	APPROX. KG/PC
CLOCKWISE (CC)	ANTICLOCKWISE (ACC)				
VRSH50	VRSH50ACC	2	14	200	1.2
VRSH80	VRSH80ACC	2 1/2 & 3	16.5	200	1.2
VRSH100	VRSH100ACC	4	18.5	250	2
VRSH150	VRSH150ACC	6	18.5	350	3.8
VRSH200	VRSH200ACC	8	23.5	350	4
VRSH300	VRSH300ACC	10 & 12	26.5	500	8



## Accessories for Resilient Seat Gate Valve

Accessories for Resilient Seat Gate Valve			
AAP CODE	FUNCTION	L	APPROX. KG/PC
VRSSE150	Stem Extension	150	2.5
VRSSE300	Stem Extension	300	3.7
VRSSE375	Stem Extension	375	4.2
VRSKEY	Key	900	5





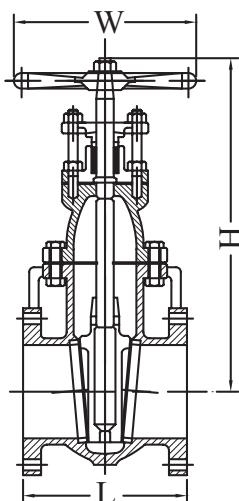






## [17] GATE VALVES

### Cast Iron Flanged Solid Wedge Disc Gate Valve Non- Rising Stem (Table E)



Materials	
PART	MATERIAL
Body	Cast Iron
Seat Ring	Cast Bronze
Wedge Face Ring	Cast Bronze
Wedge	Cast Iron
Wedge Nut	Cast Bronze
Stem	Brass
Body Gasket	Full Face Nitrile Gasket
Bolt and Nut	Z/P Steel
Bonnet	Cast Iron
Gland Follower Bolt	Steel
Stuffing Box Gasket	Teflon
Stuffing Box	Cast Iron
Packing	Teflon
Gland Follower	Ductile Iron
Yoke bushing	Cast Brass
Hand wheel	Cast Iron

Specifications	
Flange	AS2129
MAX Temperature	100°C
Cold Working Pressure	1379kPa

Applications - Water, Sewage and neutral liquid applications

Cast Iron Flanged Solid Wedge Disc Gate Valve Non- Rising Stem (Table E)

AAP CODE	IMPERIAL SIZE	L	H	W	HOLE DIAMETER	NO. HOLES	APPROX. KG/PC
VCIG50E	2	178	313	200	18	4	18
VCIG65E	2 1/2	191	334	200	18	4	25
VCIG80E	3	203	370	200	18	4	30
VCIG94E	4	229	425	254	18	8	47
VCIG95E	5	254	453	300	18	8	65
VCIG96E	6	267	544	300	22	8	80
VCIG98E	8	292	667	345	22	8	141
VCIGX25E	10	330	754	400	22	12	202
VCIGX30E	12	356	879	450	26	12	291

## Cast Iron Flanged Solid Wedge Disc Gate Valve - Rising Stem

Materials		Specifications	
PART	MATERIAL	Flange	AS2129
Body	Cast Iron	MAX Temperature	200°C
Seat Ring	Cast Bronze	Cold Working Pressure	1379kPa
Wedge Face Ring	Cast Bronze	Applications - Water, Sewage and neutral liquid applications	
Wedge	Cast Iron		
Wedge Nut	Cast Bronze		
Stem	Brass		
Body Gasket	Graphite/Steel		
Bonnet	Cast Iron		
Stuffing Box Gasket	Teflon		
Stuffing Box	Cast Iron		
Packing	Teflon		
Gland Follower	Ductile Iron		
Yoke bushing	Cast Brass		
Hand wheel	Cast Iron		

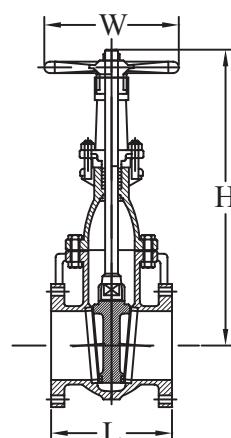
## Cast Iron Solid Wedge Disc Gate Valve - Rising Stem (Table E)

Cast Iron Flanged Solid Wedge Disc Gate Valve - Rising Stem (Table E)							
AAP CODE	IMPERIAL SIZE	L	H	W	HOLE DIAMETER	NO. HOLES	APPROX. KG/PC
VCIGRS50E	2	178	320	200	18	4	20
VCIGRS65E	2 1/2	191	345	200	18	4	26
VCIGRS80E	3	203	387	200	18	4	32
VCIGRS94E	4	229	490	254	18	8	50
VCIGRS95E	5	254	576	300	18	8	70
VCIGRS96E	6	267	680	300	22	8	89
VCIGRS98E	8	292	808	345	22	8	141
VCIGRSX25E	10	330	1010	406	22	12	218
VCIGRSX30E	12	356	1080	450	26	12	315



## Cast Iron Solid Wedge Disc Gate Valve - Rising Stem (Table D)

Cast Iron Solid Wedge Disc Gate Valve - Rising Stem (Table D)							
AAP CODE	IMPERIAL SIZE	L	H	W	HOLES DIAMETER	NO. HOLES	APPROX. KG/PC
VCIGRS94D	4	229	562	254	18	4	50



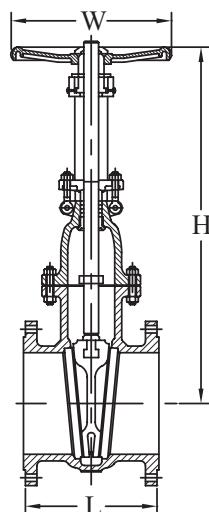
## Cast Steel Flanged Gate Valves ANSI 150 &amp; 300



Materials		Specifications	
PART	MATERIAL	Flange Dimensions	ANSI B16.5
Body	ASTM A216 WCB	MAX Working Temperature	Class 150 300°C Class 300 440°C
Seat Ring	ASTM + H/F Stellite	Cold Working Pressure	Class 150 1960kPa Class 300 5100kPa
Wedge	ASTM A216 WCB+13Cr		
Stem	ASTM A276 T410		
Bonnet Gasket	13Cr+Graphite		
Bonnet	ASTM A216 WCB		
Back Seat Bushing	ASTM A276 T410		
Packing	Graphite		
Packing Gland	ASTM A276 T410		
Gland Follower	ASTM A216 WCB		
Oil Cup	Brass		
Stem Nut Bushing	Carbon Steel		
Hand wheel	ASTM A536		

Applications - Petrochemical, Refinery, Chemical, Pharmaceutical Power

ANSI 150



Cast Steel Flanged Gate Valve ANSI 150							
AAP CODE	IMPERIAL SIZE	L	H	W	NO. HOLES	HOLE DIAMETER	APPROX. KG/PC
VGA15050	2	177.8	342	200	4	20	23
VGA15065	2 1/2	190.5	415	200	4	20	30
VGA15080	3	203.2	465	250	4	20	36
VGA15094	4	228.6	509	250	8	20	53
VGA15095	5	254	676	300	8	22	71
VGA15096	6	266.7	641	300	8	22	85
VGA15098	8	292.1	784	360	8	22	136
VGA150X25	10	330.2	922	400	12	26	220
VGA150X30	12	355.6	1096	450	12	26	323

ANSI 300

Cast Steel Flanged Gate Valve ANSI 300 (Reducing Bore)							
AAP CODE	IMPERIAL SIZE	L	H	W	NO. HOLES	HOLE DIAMETER	APPROX. KG/PC
VGA30050	2	215.9	356	250	8	20	30
VGA30065	2 1/2	241.3	395	250	8	22	39
VGA30080	3	282.3	440	300	8	22	55
VGA30094	4	304.8	500	350	8	22	83
VGA30096	6	403.4	630	400	12	22	137
VGA30098	8	419.1	850	500	12	26	240

## Notes