

# RESILIENT SEAT DOUBLE FLANGED INTEGRAL BYPASS PN16

Version 2.0

**Clover Resilient Seat Double Flange Integral Bypass Gate Valves are suitable for use in pressure and non-pressure water supply and sewerage applications.**

## SPECIFICATIONS

**Diameter Range:** DN375 - DN600

**Nominal Pressure:** 1,600kPa

**End Connections:**

Flange AS/NZS4087 Fig. B5

**Maximum Operating Temperature:** 40°

**Product/Watermark Certification:**

Australian Certification Services - 25731

**Compliance:**

- AS/NZS2638.2 "Gate valves for waterworks purposes - Resilient seated"
- AS/NZS4158 "Thermal-bonded polymeric coatings on valves and fittings for water industry purposes"
- AS1646 "Elastomeric seals for waterworks purposes"
- AS1831 "Ductile cast iron"
- AS/NZS4087 "Metallic flanges for waterworks purposes"
- AS/NZS4020 "Testing of products for use in contact with drinking water"
- ISO5211 "Industrial Valves - Part-turn actuator attachments"

**WSAA Product Appraisal:** PA11/12

**WSAA Purchase Specification:**

WSA PS260 – Gate Valves, Resilient Seated for Pressure Applications – Water Supply and Sewerage

**Options & Accessories:**

- Anti-clockwise and clockwise closing models available
- Handwheel
- Gearbox Operator (Spur & Bevel)
- ISO5211 Top Mounting Flange
- Anchor Legs
- Lilac key-cap available for recycled water applications
- Alternate flange drillings available

**Recommended Specifications:**

- Gate valves shall be Clover resilient seated non-rising spindle type with integral bypass conforming to AS/NZS2638.2
- Gate valves shall close in an anti-clockwise / clockwise direction
- Gate valves shall be fitted with a keycap / handwheel
- Gate valve allowable operating pressure shall be 1,600kPa
- Protective coatings of gate valves shall be thermally applied polymeric type in accordance with AS/NZS4158
- Flanges shall be raised face type in accordance with AS/NZS4087 Fig. B5



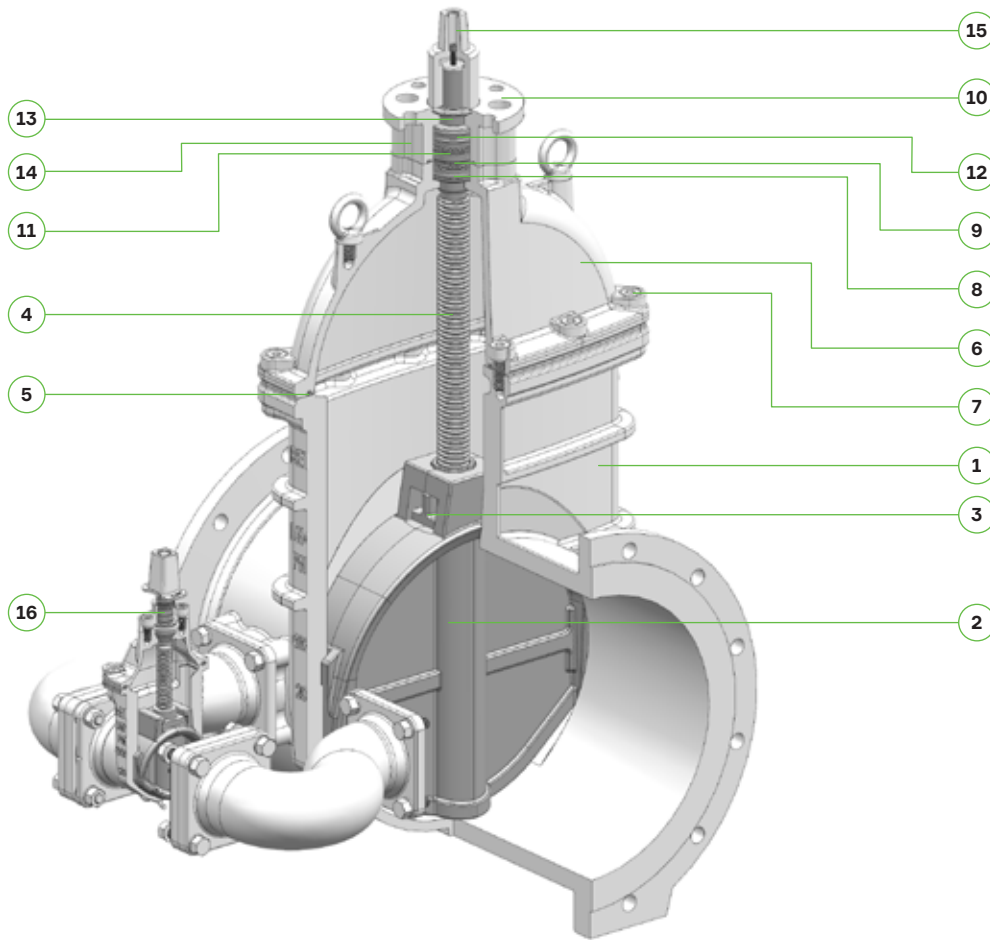
## FEATURES

- 10 year manufacturers warranty
- Compact design reduces overall footprint required for installation
- Low operating torque for fast and efficient operation
- Full bore design eliminates debris build up
- Key cap or handwheel operable
- High strength and impact resistant ductile iron body
- Thermally bonded polymeric coating for long life corrosion protection
- Isolated 316SS stainless steel fasteners encapsulated with hot-melt coating for long-life corrosion protection
- Ductile iron wedge encapsulated with vulcanised EPDM elastomer and abrasion resistant nylon guide rails
- Ductile iron wedge encapsulated with vulcanised EPDM elastomer and integrated guide rails
- Suitable for installation in either horizontal or vertical position

## APPLICATIONS

- Used to isolate flow within pipeline sections, pipeline equipment and offtakes
- Gate valves should not be used for the purposes of throttling or adjusting flow
- Potable and recycled water supply
- Irrigation and raw water
- Gravity and sewer rising mains
- Fire systems
- Stormwater and drainage
- Pressure and non-pressure
- Buried and above ground

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## COMPONENTS

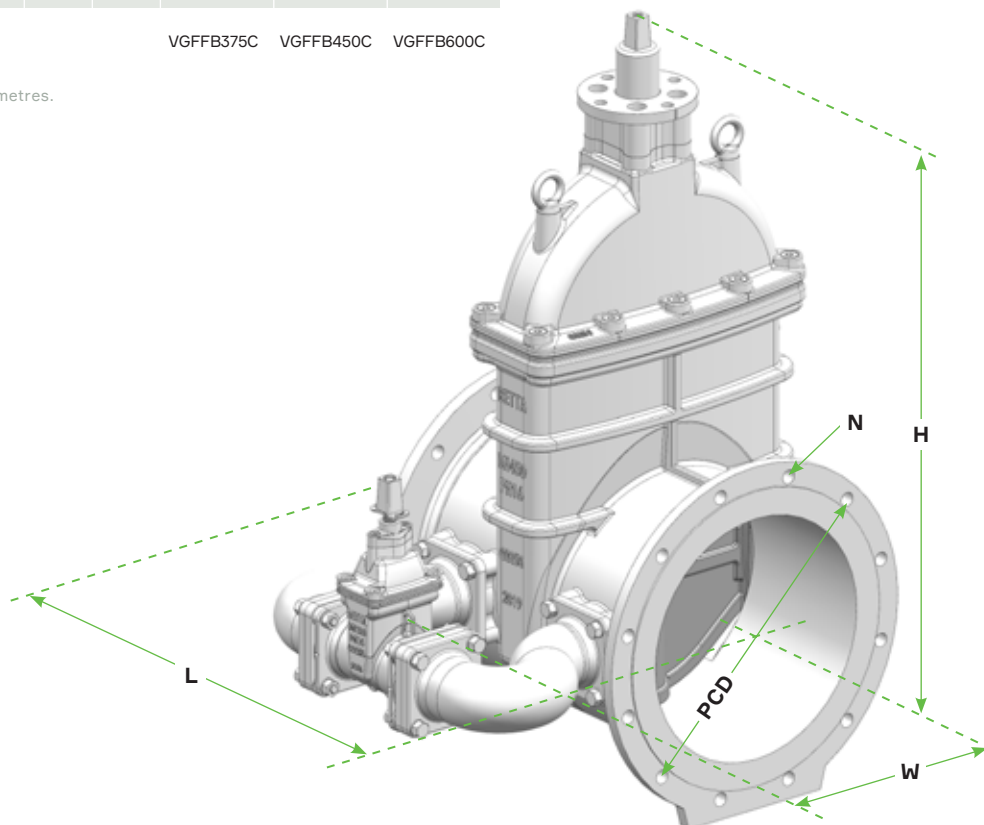
ITEM	PART NAME	MATERIAL	STANDARD/GRADE
1	Body	Ductile Iron/Polymeric Coating	AS1831 500-7/AS4158
2	Wedge	Ductile Iron (EPDM Encapsulated)	AS1831 500-7/AS1646 EPDM
3	Stem Nut	Copper Alloy (Aluminium Bronze)	AS1565 C95210
4	Spindle	Stainless Steel 431	ASTM A276/431
5	Body Gasket	EPDM Elastomer	AS1646/EPDM
6	Bonnet	Ductile Iron/Polymeric Coating	AS1831 500-7/AS4158
7	Body Bolt	Stainless Steel 316	ASTM A276/316
8	Thrust Collar	Copper Alloy(Dezincification Resistant)	AS1568 C48600
9	Bearing	Steel	9Cr18
10	Bonnet Bolt	Stainless Steel 316	ASTM A276/316
11	O'Ring	NBR Elastomer	AS1646/NBR
12	Seal Kit	NBR Elastomer	AS1646/NBR
13	Dust Cover	EPDM Elastomer	AS1646/EPDM
14	Seal Retainer Housing	Stainless Steel 316	ASTM A276/316
15	Spindle Key Cap	Ductile Iron	AS1831 GJS/500-7
16	Gate Valve		AS/NZS2638.2

# RESILIENT SEAT DOUBLE FLANGED INTEGRAL BYPASS PN16

SPECIFICATIONS	SYM	UNITS	DN375	DN450	DN600
LENGTH (FACE TO FACE)	L	mm	610	650	785
HEIGHT (CENTRE TO KEYCAP)	H	mm	935	1080	1345
WIDTH (CENTRE TO CENTRE)	W	mm	516	555	835
FLANGE BOLT HOLES	N	mm	12Ø26	12Ø26	16Ø30
PITCH CIRCLE DIAMETER	PCD	mm	495	584	756
WEIGHT OF UNIT (KEYCAP FITTED)		kg	275	565	830
TURNS TO CLOSE (APPROX)		Turns	55	58	68
ACTUAL TORQUE TO SEAL (APPROX)		Nm	310	400	500
MAXIMUM OPERATING TORQUE	MOT	Nm	500	600	800
ISO5211 TOP MOUNTING FLANGE			F14/F16	F16	F16
BYPASS DIAMETER	DN	mm	100	100	150
PRODUCT CODE (ANTI-CLOCKWISE CLOSE)			VGFFB375	VGFFB450	VGFFB600
PRODUCT CODE (CLOCKWISE CLOSE)			VGFFB375C	VGFFB450C	VGFFB600C

All dimensions are in millimetres.

PRESSURE	SYM	UNITS	
PRESSURE NOMINAL	PN	Nom	16
ALLOWABLE OPERATING PRESSURE	AOP	kPa	1,600
MAXIMUM ALLOWABLE OPERATING PRESSURE	MAOP	kPa	1,920
ALLOWABLE SITE TEST PRESSURE	ASTP	kPa	2,000
PRODUCTION TEST - BODY		kPa	2,400
PRODUCTION TEST - SEAT		kPa	1,760



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