



RESILIENT SEATED GATE VALVES

AS/NZS 2638.2

Potable water, non-potable water and wastewater systems

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Resilient seat gate valves comply with AS 2638.2 and are suitable for use in potable water, non-potable water and wastewater systems installed above ground and below ground.

TECHNICAL DATA

Standard: AS 2638.2 (Lic OMK25731)

WSAA Product Appraisal 1121 Issue 8 – Betta Valves

DN 80 - DN 375 Size Range:

1600 kPa (PN 16) Pressures: **Operating Pressure**

Test Pressure – Seal 1760 kPa Test Pressure – Body 2400 kPa

Max 80 deg C, Temperatures:

Max 40 deg C for potable water systems to AS 4020

Fusion Bonded coating to AS/NZS 4158 Coating:

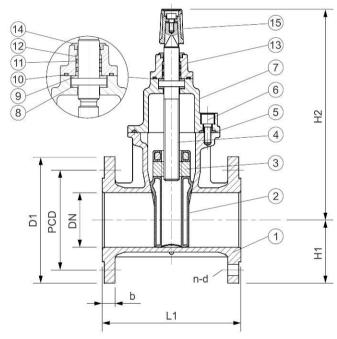
End connections: Flange (AS 4087, PN16)

Closing options: Anti-clockwise (ACC) and Clockwise closing (CC)

Options: Handwheels or Gearbox actuators

ISO flange for gearbox actuators

Extension spindles





FEATURES

High strength and corrosion resistant materials

EPDM encapsulated ductile iron wedge ensures effective sealing

Full bore design eliminates blockages

Anti-friction components for lower operating torques

COMPONENTS

| ITEM | PART | MATERIAL | STANDARD |
|------|--|---|----------------------|
| 1 | Body | Ductile Iron Gr 500-7 | AS 1831 |
| 2 | Wedge | Ductile Iron Gr 500-7, EPDM encapsulated | AS 1831 AS 1646 |
| 3 | Stem Nut | DR Brass C48600 | AS 1568 |
| 4 | Stem | Stainless Steel Gr 431 | ASTM A276 |
| 5 | Bonnet Gasket | EPDM | AS 1646 |
| 6 | Bolts - Bonnet, Dust Cover & Stem Cap | Stainless Steel Gr 316 | ASTM A276 |
| 7 | Bonnet | Ductile Iron Gr 500-7 | AS 1831 |
| 8 | Washer | EPDM | AS 1646 |
| 9 | Washer | DR Brass C48600 | AS 1568 |
| 10 | Bonnet O-Ring | NBR | AS 1646 |
| 11 | O-Ring Seals | NBR | AS 1646 |
| 12 | Thrust Collars | POM | AS 1646 |
| 13 | Seal Retainer | DN80-150 - SS Gr 316 Other sizes - DI Gr 500-7 | ASTM A276 AS 1831 |
| 14 | Dust Cover | EPDM | AS 1646 |
| 15 | Stem Cap | Ductile Iron Gr 500-7 | AS 1831 |

| DN | L1 | H1 | H2 | D1 | PCD | n-d | b | No Turns | Torque In Nm | Weight kg | ACC | сс |
|-----|-----|-----|-----|-----|-----|--------|----|-------------|-----------------|--------------|-------|--------|
| 80 | 203 | 93 | 310 | 185 | 146 | 4-18d | 18 | 22 | 50 | 16 | VGF08 | VGF08C |
| 100 | 229 | 108 | 340 | 215 | 178 | 4-18d | 20 | 22 | 60 | 18 | VGF10 | VGF10C |
| 150 | 267 | 140 | 450 | 280 | 235 | 8-18d | 23 | 32 | 110 | 34 | VGF15 | VGF15C |
| 200 | 292 | 168 | 580 | 335 | 292 | 8-18d | 23 | 35 | 140 | 66 | VGF20 | VGF20C |
| 225 | 305 | 185 | 670 | 370 | 324 | 8-18d | 24 | 43 | 200 | 88 | VGF22 | VGF22C |
| 250 | 330 | 203 | 670 | 405 | 356 | 8-22d | 24 | 43 | 200 | 95 | VGF25 | VGF25C |
| 300 | 356 | 228 | 780 | 455 | 406 | 12-22d | 30 | 44 | 220 | 135 | VGF30 | VGF30C |
| 375 | 381 | 275 | 945 | 550 | 495 | 12-26d | 33 | 55 | 310 | 255 | VGF37 | VGF37C |



Resilient seat gate valves comply with AS 2638.2 and are suitable for use in potable water, non-potable water and wastewater systems installed above ground and below ground.

TECHNICAL DATA

Standard: AS 2638.2 (Lic OMK25731)

WSAA Product Appraisal 1121 Issue 8 – Betta Valves

DN 450 - DN 600 Size Range:

Pressures: **Operating Pressure** 1600 kPa (PN 16)

Test Pressure – Seal 1760 kPa 2400 kPa Test Pressure - Body

Temperatures: Max 80 deg C,

Max 40 deg C for potable water systems to AS 4020

Coating: Fusion Bonded coating to AS/NZS 4158

Flange (AS 4087, PN16) End connections: Actuator Flange: F16 ISO 5211 Flange

Anti-clockwise (ACC) and Clockwise closing (CC) Closing options:

Options: Handwheels or Gearbox actuators

Extension spindles



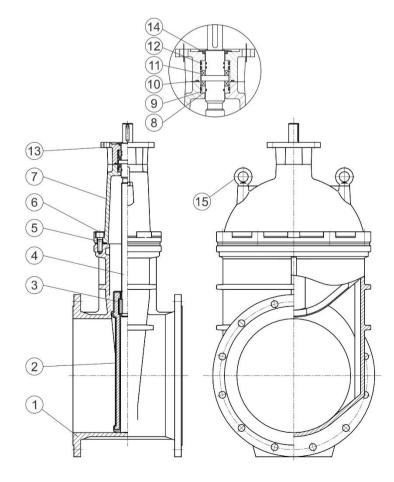
FEATURES

High strength and corrosion resistant materials EPDM encapsulated ductile iron wedge ensures effective sealing Full bore design eliminates blockages

Anti-friction components for lower operating torques

COMPONENTS

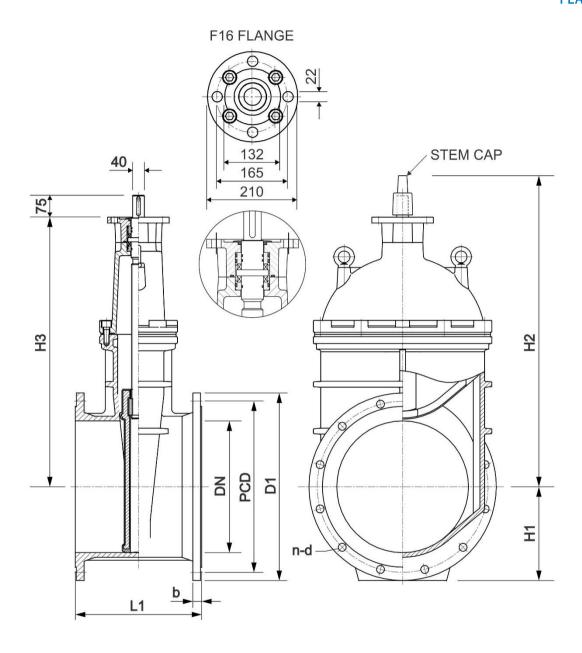
| ITEM | PART | MATERIAL | STANDARD |
|------|--|---|--------------------|
| 1 | Body | Ductile Iron Gr 500-7 | AS 1831 |
| 2 | Wedge | Ductile Iron Gr 500-7, EPDM encapsulated | AS 1831 AS 1646 |
| 3 | Stem Nut | Bronze C95210 | AS 1565 |
| 4 | Stem | Stainless Steel Gr 431 | ASTM A276 |
| 5 | Bonnet Gasket | EPDM | AS 1646 |
| 6 | Bolts - Bonnet, Dust Cover & Stem Cap | Stainless Steel Gr 316 | ASTM A276 |
| 7 | Bonnet | Ductile Iron Gr 500-7 | AS 1831 |
| 8 | O-Ring Seals | NBR | AS 1646 |
| 9 | Bushing | Bronze C95210 | AS 1565 |
| 10 | O-Ring Seals | NBR | AS 1646 |
| 11 | Bonnet O-Ring | NBR | AS 1646 |
| 12 | Bearing | | |
| 13 | Gland Flange | Ductile Iron Gr 500-7 | AS 1831 |
| 14 | Dust Cover | EPDM | AS 1646 |
| 15 | Eyebolt | Carbon Steel | Galv |





FLANGE PN16

DN 450 - 600



| DN | L1 | H1 | H2 | Н3 | D1 | PCD | n-d | b | No Turns | Torque In Nm | Weight kg | ACC | сс |
|-----|-----|-------|------|------|-----|-----|--------|----|-------------|-----------------|--------------|-------|--------|
| 450 | 432 | 320 | 1069 | 920 | 640 | 584 | 12-26d | 33 | 58 | 420 | 395 | VGF45 | VGF46C |
| 500 | 457 | 352.5 | 1180 | 1031 | 705 | 641 | 16-26d | 35 | 64 | 500 | 510 | VGF50 | VGF50C |
| 600 | 508 | 412.5 | 1334 | 1185 | 825 | 756 | 16-30d | 42 | 68 | 535 | 780 | VGF60 | VGF60C |



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TECHNICAL DATA

Standard: AS 2638.2 (Lic OMK25731)

WSAA Product Appraisal 1121 Issue 8 – Betta Valves

DN 450 - DN 600 Size Range:

Pressures: **Operating Pressure** 1600 kPa (PN 16)

Test Pressure – Seal 1760 kPa 2400 kPa Test Pressure - Body

Temperatures: Max 80 deg C,

Max 40 deg C for potable water systems to AS 4020

Coating: Fusion Bonded coating to AS/NZS 4158

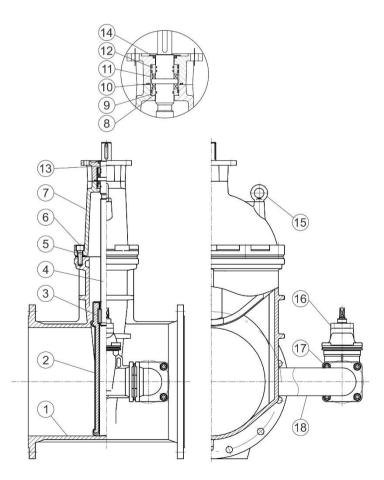
Flange (AS 4087, PN16) End connections: Actuator Flange: F16 ISO 5211 Flange

Resilient Seat PN16 AS 2638.2 Bypass Valve:

Anti-clockwise (ACC) and Clockwise closing (CC) Closing options:

Handwheels or Gearbox actuators Options:

Extension spindles





FEATURES

High strength and corrosion resistant materials EPDM encapsulated ductile iron wedge ensures effective sealing Full bore design eliminates blockages Anti-friction components for lower operating torques

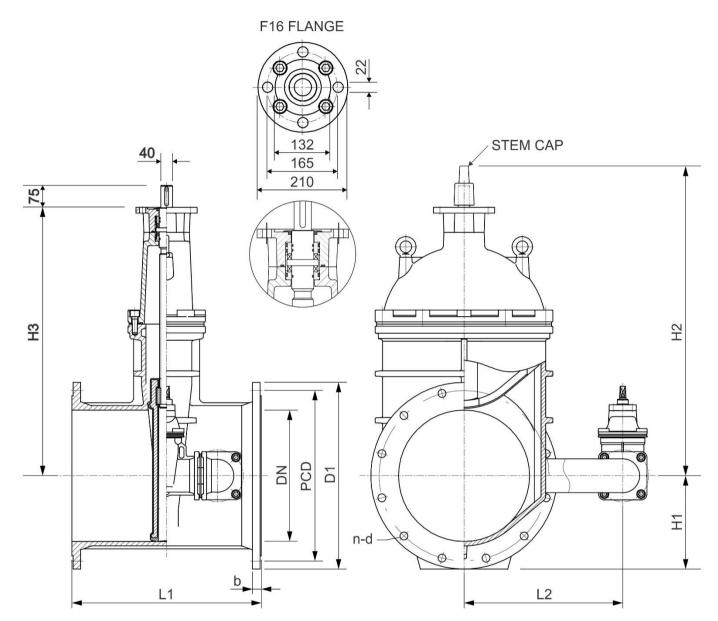
COMPONENTS

| ITEM | PART | MATERIAL | STANDARD |
|------|--|---|--------------------|
| 1 | Body | Ductile Iron Gr 500-7 | AS 1831 |
| 2 | Wedge | Ductile Iron Gr 500-7, EPDM encapsulated | AS 1831 AS 1646 |
| 3 | Stem Nut | Bronze C95210 | AS 1565 |
| 4 | Stem | Stainless Steel Gr 431 | ASTM A276 |
| 5 | Bonnet Gasket | EPDM | AS 1646 |
| 6 | Bolts - Bonnet, Dust Cover & Stem Cap | Stainless Steel Gr 316 | ASTM A276 |
| 7 | Bonnet | Ductile Iron Gr 500-7 | AS 1831 |
| 8 | O-Ring Seals | NBR | AS 1646 |
| 9 | Bushing | Bronze C95210 | AS 1565 |
| 10 | O-Ring Seals | NBR | AS 1646 |
| 11 | Bonnet O-Ring | NBR | AS 1646 |
| 12 | Bearing | | |
| 13 | Gland Flange | Ductile Iron Gr 500-7 | AS 1831 |
| 14 | Dust Cover | EPDM | AS 1646 |
| 15 | Eyebolt | Carbon Steel | Galv |
| 16 | Bypass Valve | Resilient Seat PN16 | AS2638.2 |
| 17 | Flange Bolt/Nuts | Stainless Steel Gr 316 | ASTM A276 |
| 18 | Bypass Bend | Ductile Iron Gr 500-7 | AS 1831 |



FLANGE BYPASS PN16

DN 450 - 600



| DN | Bypass DN | L1 | L2 | H1 | H2 | НЗ | D1 | PCD | n-d | b | No Turns | Torque In Nm | Weight kg | ACC | сс |
|-----|--------------|-----|-----|-------|------|------|-----|-----|--------|----|-------------|-----------------|--------------|----------|-----------|
| 450 | 100 | 650 | 555 | 320 | 1069 | 920 | 640 | 584 | 12-26d | 33 | 58 | 420 | 395 | VGFB4510 | VGFB4510C |
| 600 | 150 | 785 | 830 | 412.5 | 1334 | 1185 | 825 | 756 | 16-30d | 42 | 68 | 535 | 780 | VGFB6015 | VGFB6015C |



Resilient seat gate valves comply with AS 2638.2 and are suitable for use in potable water, non-potable water and wastewater systems installed above ground and below ground.

TECHNICAL DATA

Standard: AS 2638.2

DN 80 - DN 200 (Betta Valves) Size Range:

Pressures: **Operating Pressure** 2500 kPa (PN 25)

2750 kPa Test Pressure – Seal 3750 kPa Test Pressure - Body

Max 80 deg C, Temperatures:

Max 40 deg C for potable water systems to AS 4020

Fusion Bonded coating to AS/NZS 4158 Coating:

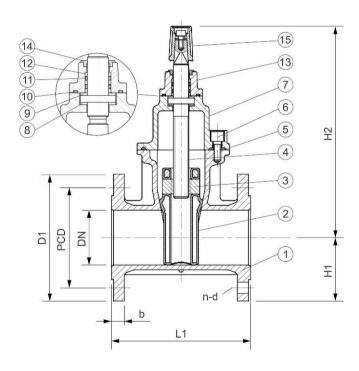
End connections: Flange (AS 2129 Table F)

Closing options: Anti-clockwise (ACC) and Clockwise closing (CC)

Options: Handwheels or Gearbox actuators

ISO flange for gearbox actuators

Extension spindles





FEATURES

High strength and corrosion resistant materials

EPDM encapsulated ductile iron wedge ensures effective

sealing

Full bore design eliminates blockages

Anti-friction components for lower operating torques

COMPONENTS

| ITEM | PART | MATERIAL | STANDARD |
|------|--|---|--------------------|
| 1 | Body | Ductile Iron Gr 500-7 | AS 1831 |
| 2 | Wedge | Ductile Iron Gr 500-7, EPDM encapsulated | AS 1831 AS 1646 |
| 3 | Stem Nut | Bronze C95210 | AS 1565 |
| 4 | Stem | Stainless Steel Gr 431 | ASTM A276 |
| 5 | Bonnet Gasket | EPDM | AS 1646 |
| 6 | Bolts - Bonnet, Dust Cover & Stem Cap | Stainless Steel Gr 316 | ASTM A276 |
| 7 | Bonnet | Ductile Iron Gr 500-7 | AS 1831 |
| 8 | Washer | EPDM | AS 1646 |
| 9 | Washer | Bronze C95210 | AS 1565 |
| 10 | Bonnet O-Ring | NBR | AS 1646 |
| 11 | O-Ring Seals | NBR | AS 1646 |
| 12 | Thrust Collars | POM | AS 1646 |
| 13 | Seal Retainer | Ductile Iron Gr 500-7 | AS 1831 |
| 14 | Dust Cover | EPDM | AS 1646 |
| 15 | Stem Cap | Ductile Iron Gr 500-7 | AS 1831 |

| DN | L1 | H1 | H2 | D1 | PCD | n-d | b | No Turns | Torque In Nm | Weight kg | ACC | сс |
|-----|-----|-----|-----|-----|-----|--------|----|-------------|-----------------|--------------|----------|-----------|
| 80 | 203 | 103 | 225 | 205 | 165 | 8-18d | 19 | 22 | 50 | 23 | VGFH2508 | VGFH2508C |
| 100 | 229 | 115 | 340 | 230 | 191 | 8-18d | 22 | 22 | 60 | 30 | VGFH2510 | VGFH2510C |
| 150 | 267 | 153 | 450 | 305 | 260 | 12-22d | 25 | 32 | 110 | 52 | VGFH2515 | VGFH2515C |
| 200 | 292 | 185 | 580 | 370 | 324 | 12-22d | 29 | 35 | 140 | 75 | VGFH2520 | VGFH2520C |



Resilient seat gate valves comply with AS 2638.2 and are suitable for use in potable water, non-potable water and wastewater systems installed above ground and below ground.

TECHNICAL DATA

Standard: AS 2638.2 (Lic OMK25731)

WSAA Product Appraisal 1121 Issue 8 – Betta Valves

Size Range: DN 100 - DN 375

Operating Pressure Pressures: 1600 kPa (PN 16)

Test Pressure - Seal 1760 kPa Test Pressure - Body 2400 kPa

Temperatures: Max 80 deg C,

Max 40 deg C for potable water systems to AS 4020

Coating: Fusion Bonded coating to AS/NZS 4158

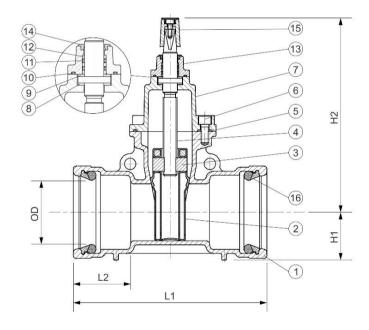
Socket (AS/NZS 2280) End connections:

Anti-clockwise (ACC) and Clockwise closing (CC) Closing options:

Options: Handwheels or Gearbox actuators ISO flange for gearbox actuators

Extension spindles

Socket Seal Ring to suit PVC Series 1





FEATURES

High strength and corrosion resistant materials

EPDM encapsulated ductile iron wedge ensures effective sealing

Full bore design eliminates blockages

Anti-friction components for lower operating torques

COMPONENTS

| ITEM | PART | MATERIAL | STANDARD |
|------|--|---|----------------------|
| 1 | Body | Ductile Iron Gr 500-7 | AS 1831 |
| 2 | Wedge | Ductile Iron Gr 500-7, EPDM encapsulated | AS 1831 AS 1646 |
| 3 | Stem Nut | DR Brass C48600 | AS 1568 |
| 4 | Stem | Stainless Steel Gr 431 | ASTM A276 |
| 5 | Bonnet Gasket | EPDM | AS 1646 |
| 6 | Bolts - Bonnet, Dust Cover & Stem Cap | Stainless Steel Gr 316 | ASTM A276 |
| 7 | Bonnet | Ductile Iron Gr 500-7 | AS 1831 |
| 8 | Washer | EPDM | AS 1646 |
| 9 | Washer | DR Brass C48600 | AS 1568 |
| 10 | Bonnet O-Ring | NBR | AS 1646 |
| 11 | O-Ring Seals | NBR | AS 1646 |
| 12 | Thrust Collars | POM | AS 1646 |
| 13 | Seal Retainer | DN80-150 - SS Gr 316 Other sizes - DI Gr 500-7 | ASTM A276 AS 1831 |
| 14 | Dust Cover | EPDM | AS 1646 |
| 15 | Stem Cap | Ductile Iron Gr 500-7 | AS 1831 |
| 16 | Socket Seal Ring | EPDM | AS 1646 |
| | | | |

| DN | OD | L1 | L2 | H1 | H2 | No Turns | Torque In Nm | Weight kg | ACC | сс |
|-----|-----|-----|-----|-----|------|-------------|-----------------|--------------|-------|--------|
| 100 | 122 | 342 | 100 | 87 | 330 | 22 | 60 | 24 | VGS10 | VGS10C |
| 150 | 177 | 372 | 105 | 117 | 420 | 32 | 110 | 46 | VGS15 | VGS15C |
| 200 | 232 | 456 | 120 | 144 | 580 | 35 | 140 | 71 | VGS20 | VGS20C |
| 225 | 259 | 477 | 135 | 158 | 675 | 43 | 200 | 86 | VGS22 | VGS22C |
| 250 | 286 | 482 | 144 | 172 | 675 | 43 | 200 | 92 | VGS25 | VGS25C |
| 300 | 345 | 520 | 144 | 203 | 752 | 44 | 220 | 138 | VGS30 | VGS30C |
| 375 | 426 | 600 | 172 | 250 | 1035 | 55 | 310 | 295 | VGS37 | VGS37C |

DN 100 - 150



APPLICATIONS

Resilient seat gate valves comply with AS 2638.2 and are suitable for use in potable water, non-potable water and wastewater systems installed above ground and below ground.

TECHNICAL DATA

Standard: AS 2638.2 (Lic OMK25731)

WSAA Product Appraisal 1121 Issue 8 – Betta Valves

Size Range: DN 100 - DN 150

Operating Pressure 1600 kPa (PN 16) Pressures:

Test Pressure – Seal 1760 kPa Test Pressure - Body 2400 kPa

Temperatures: Max 80 deg C,

Max 40 deg C for potable water systems to AS 4020

Fusion Bonded coating to AS/NZS 4158 Coating: End connections: Flange (AS 4087, PN16), Socket (AS/NZS 2280)

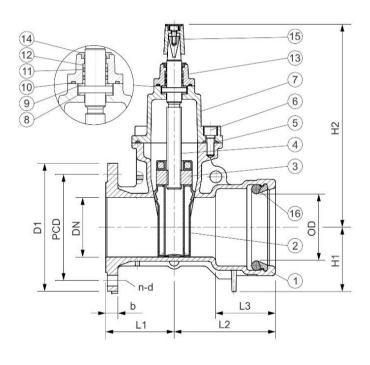
Closing options: Anti-clockwise (ACC) and Clockwise closing (CC)

Handwheels or Gearbox actuators Options:

ISO flange for gearbox actuators

Extension spindles

Socket Seal Ring to suit PVC Series 1





FEATURES

High strength and corrosion resistant materials

EPDM encapsulated ductile iron wedge ensures effective sealing

Full bore design eliminates blockages

Anti-friction components for lower operating torques

COMPONENTS

| ITEM | PART | MATERIAL | STANDARD |
|------|--|--|----------------------|
| 1 | Body | Ductile Iron Gr 500-7 | AS 1831 |
| 2 | Wedge | Ductile Iron Gr 500-7, EPDM encapsulated | AS 1831 AS 1646 |
| 3 | Stem Nut | DR Brass C48600 | AS 1568 |
| 4 | Stem | Stainless Steel Gr 431 | ASTM A276 |
| 5 | Bonnet Gasket | EPDM | AS 1646 |
| 6 | Bolts - Bonnet, Dust Cover & Stem Cap | Stainless Steel Gr 316 | ASTM A276 |
| 7 | Bonnet | Ductile Iron Gr 500-7 | AS 1831 |
| 8 | Washer | EPDM | AS 1646 |
| 9 | Washer | DR Brass C48600 | AS 1568 |
| 10 | Bonnet O-Ring | NBR | AS 1646 |
| 11 | O-Ring Seals | NBR | AS 1646 |
| 12 | Thrust Collars | POM | AS 1646 |
| 13 | Seal Retainer | DN 80-200: SS Gr 316 Other sizes: DI Gr 500-7 | ASTM A276 AS 1831 |
| 14 | Dust Cover | EPDM | AS 1646 |
| 15 | Stem Cap | Ductile Iron Gr 500-7 | AS 1831 |
| 16 | Socket Seal Ring | EPDM | AS 1646 |
| | | | |

| DN | OD | L1 | L2 | L3 | H1 | H2 | D1 | PCD | n-d | b | No Turns | Torque In Nm | Weight kg | ACC | СС |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|----|-------------|-----------------|--------------|--------|---------|
| 100 | 122 | 115 | 205 | 135 | 108 | 365 | 215 | 178 | 4-18d | 20 | 22 | 60 | 24 | VGSF10 | VGSF10C |
| 150 | 177 | 134 | 232 | 150 | 140 | 470 | 280 | 235 | 8-18d | 23 | 32 | 110 | 46 | VGSF15 | VGSF15C |



Resilient seat gate valves comply with AS 2638.2 and are suitable for use in potable water, non-potable water and wastewater systems installed above ground and below ground.

TECHNICAL DATA

Standard: AS 2638.2 (Lic OMK25731)

WSAA Product Appraisal 1121 Issue 8 – Betta Valves

Size Range: DN 100 - DN 150

Operating Pressure 1600 kPa (PN 16) Pressures:

Test Pressure – Seal 1760 kPa Test Pressure - Body 2400 kPa

Temperatures: Max 80 deg C,

Max 40 deg C for potable water systems to AS 4020

Fusion Bonded coating to AS/NZS 4158 Coating:

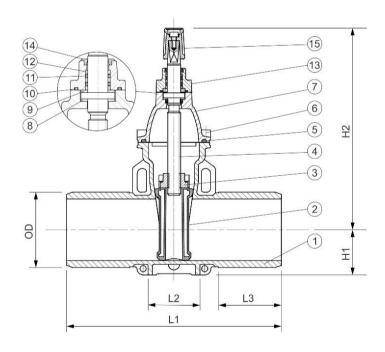
End connections: Spigot (AS/NZS 2280)

Closing options: Anti-clockwise (ACC) and Clockwise closing (CC)

Options: Handwheels or Gearbox actuators

ISO flange for gearbox actuators

Extension spindles





FEATURES

High strength and corrosion resistant materials

EPDM encapsulated ductile iron wedge ensures effective sealing

Full bore design eliminates blockages

Anti-friction components for lower operating torques

COMPONENTS

| ITEM | PART | MATERIAL | STANDARD |
|------|--|---|----------------------|
| 1 | Body | Ductile Iron Gr 500-7 | AS 1831 |
| 2 | Wedge | Ductile Iron Gr 500-7, EPDM encapsulated | AS 1831 AS 1646 |
| 3 | Stem Nut | DR Brass C48600 | AS 1568 |
| 4 | Stem | Stainless Steel Gr 431 | ASTM A276 |
| 5 | Bonnet Gasket | EPDM | AS 1646 |
| 6 | Bolts - Bonnet, Dust Cover & Stem Cap | Stainless Steel Gr 316 | ASTM A276 |
| 7 | Bonnet | Ductile Iron Gr 500-7 | AS 1831 |
| 8 | Washer | EPDM | AS 1646 |
| 9 | Washer | DR Brass C48600 | AS 1568 |
| 10 | Bonnet O-Ring | NBR | AS 1646 |
| 11 | O-Ring Seals | NBR | AS 1646 |
| 12 | Thrust Collars | POM | AS 1646 |
| 13 | Seal Retainer | DN80-150 - SS Gr 316 Other sizes - DI Gr 500-7 | ASTM A276 AS 1831 |
| 14 | Dust Cover | EPDM | AS 1646 |
| 15 | Stem Cap | Ductile Iron Gr 500-7 | AS 1831 |

| DN | OD | L1 | L2 | L3 | H1 | H2 | No Turns | Torque In Nm | Weight kg | ACC | сс |
|-----|-----|-----|-----|-----|-----|-----|-------------|-----------------|--------------|-------|--------|
| 100 | 122 | 345 | 80 | 102 | 90 | 340 | 22 | 60 | 17 | VGP10 | VGP10C |
| 150 | 177 | 365 | 104 | 102 | 115 | 450 | 32 | 110 | 28 | VGP15 | VGP15C |

OD 90 - 280



APPLICATIONS

PE Restraint resilient seat gate valves comply with AS 2638.2 and are suitable for PE pipelines in potable water, non-potable water and wastewater systems installed above ground and below ground.

TECHNICAL DATA

Standard: AS 2638.2 (Lic OMK25731)

WSAA Appraisal 1121 Issue 8 – Betta Valves (OD 90-180)

Size Range: OD 90 - OD 280

Pressures: **Operating Pressure** 1600 kPa (PN 16)

Test Pressure – Seal 1760 kPa Test Pressure - Body 2400 kPa

Max 80 deg C, Temperatures:

Options:

Max 40 deg C for potable water systems to AS 4020

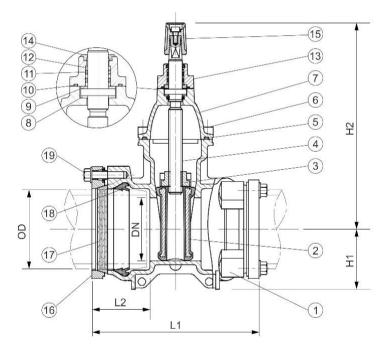
Fusion Bonded coating to AS/NZS 4158 Coating:

End connections: Mechanical Restraint for PE pipes (PN 12.5 or PN 16)

Closing options: Anti-clockwise (ACC) and Clockwise closing (CC)

> Handwheels or Gearbox actuators ISO flange for gearbox actuators

Extension spindles





FEATURES

High strength and corrosion resistant materials

EPDM encapsulated ductile iron wedge ensures effective sealing

Full bore design eliminates blockages

Anti-friction components for lower operating torques

COMPONENTS

| ITEM | PART | MATERIAL | STANDARD |
|------|--|---|----------------------|
| 1 | Body | Ductile Iron Gr 500-7 | AS 1831 |
| 2 | Wedge | Ductile Iron Gr 500-7, EPDM encapsulated | AS 1831 AS 1646 |
| 3 | Stem Nut | DR Brass C48600 | AS 1568 |
| 4 | Stem | Stainless Steel Gr 431 | ASTM A276 |
| 5 | Bonnet Gasket | EPDM | AS 1646 |
| 6 | Bolts - Bonnet, Dust Cover & Stem Cap | Stainless Steel Gr 316 | ASTM A276 |
| 7 | Bonnet | Ductile Iron Gr 500-7 | AS 1831 |
| 8 | Washer | EPDM | AS 1646 |
| 9 | Washer | DR Brass C48600 | AS 1568 |
| 10 | Bonnet O-Ring | NBR | AS 1646 |
| 11 | O-Ring Seals | NBR | AS 1646 |
| 12 | Thrust Collars | POM | AS 1646 |
| 13 | Seal Retainer | DN80-150 - SS Gr 316 Other sizes - DI Gr 500-7 | ASTM A276 AS 1831 |
| 14 | Dust Cover | EPDM | AS 1646 |
| 15 | Stem Cap | Ductile Iron Gr 500-7 | AS 1831 |
| 16 | End Ring | Ductile Iron Gr 500-7 | AS 1831 |
| 17 | Grip Ring | Brass C37710 | AS1568 |
| 18 | Seal Ring | EPDM | AS1646 |
| 19 | Bolt & Washer | Stainless Steel Gr 316 | ASTM A276 |

| | OD | DN | L1 | L2 | H1 | H2 | No Turns | Torque In Nm | Weight kg | ACC | сс |
|--|-----|-----|-----|-----|-----|-----|-------------|-----------------|--------------|--------|---------|
| | 90 | 80 | 252 | 88 | 72 | 310 | 17 | 50 | | VGG090 | VGG090C |
| | 125 | 100 | 260 | 88 | 95 | 330 | 21 | 65 | | VGG125 | VGG125C |
| | 180 | 150 | 355 | 118 | 120 | 420 | 31 | 110 | | VGG180 | VGG180C |
| | 250 | 250 | 410 | 148 | 160 | 670 | 43 | 200 | | VGG250 | VGG250C |
| | 280 | 250 | 422 | 152 | 180 | 670 | 43 | 200 | | VGG280 | VGG280C |



RISING SPINDLE PN16

DN 80 - 300

APPLICATIONS

Resilient seated rising spindle gate valves comply with AS 2638.2 and are suitable for use in potable water, non-potable water and wastewater systems installed above ground.

TECHNICAL DATA

Standard: AS 2638.2 Size Range: DN 80 - DN 300

Pressures: Operating Pressure 1600 kPa (PN 16)

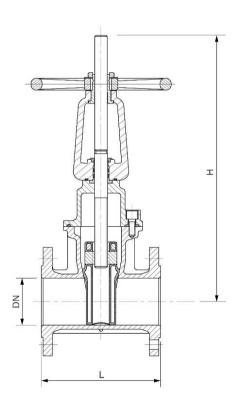
Test Pressure – Seal 1760 kPa Test Pressure - Body 2400 kPa

Max 40 deg C Temperatures:

Coating: Fusion Bonded coating to AS/NZS 4158 End connections: Flange (AS 4087, PN16), (AS 2129 T/E) Actuation: Handwheel - Clockwise closing

FEATURES

High strength and corrosion resistant materials EPDM encapsulated ductile iron wedge ensures effective sealing Full bore design eliminates blockages Anti-friction components for lower operating torques





COMPONENTS

| PART | MATERIAL | STANDARD |
|---|---|--------------------|
| Body, Bonnet, Yoke, Handwheel | Ductile Iron Gr 500-7 | AS 1831 |
| Wedge | Ductile Iron Gr 500-7, EPDM encapsulated | AS 1831 AS 1646 |
| Stem - Spindle | Stainless Steel Gr 431 | ASTM A276 |
| Stem Nut, Thrust Collar, Seal Retainer | Gunmetal C83600 | AS 1565 |
| O-Ring Seals | NBR | AS 1646 |
| Gaskets | EPDM | AS 1646 |
| Fasteners, Pins | Stainless Steel Gr 316 | ASTM A276 |
| Gaskets | EPDM | AS 1646 |

| DN | L | H (Open) | H (Closed) | PN16 FLANGE | T/E FLANGE |
|-----|-----|----------|------------|-------------|------------|
| 80 | 203 | 520 | 425 | VGO08 | VGO08E |
| 100 | 229 | 590 | 485 | VGO10 | VGO10E |
| 150 | 267 | 770 | 630 | VGO15 | VGO15E |
| 200 | 292 | 930 | 720 | VGO20 | VGO20E |
| 250 | 330 | 1200 | 940 | VGO25 | VGO25E |
| 300 | 356 | 1390 | 1080 | VGO30 | VGO30E |

PLANET STEM GEARBOX - PGS02





APPLICATIONS

The Betta Planet Stem Gearbox is compatible with the Betta resilient seat gate valves - Series VGF & VGFB DN450-600.

The valve and gearbox are suitable for use in potable water, non-potable water and wastewater systems installed above ground and below ground.

TECHNICAL DATA

Mounting Flange: F16 ISO 5211 Flange

Gear Ratio: 4.16:1

Operation: Suits Clockwise and Anti-clockwise closing valves

IP67 to AS 60529 Protection:

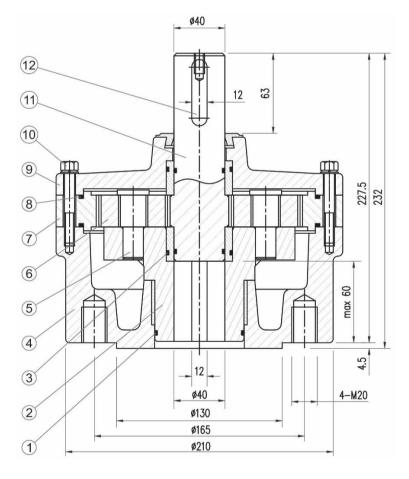
Coating: Fusion Bonded coating to AS/NZS 4158

1600 kPa (PN 16) Pressures:

Compatible Range: Betta resilient seat gate valves

Series VGF & VGFB, DN 450 - DN 600

Stem Cap, Handwheels or Extension spindles Options:





COMPONENTS

| ITEM | PART | MATERIAL | | | |
|------|-------------------|------------------------------|--|--|--|
| 1 | O-Ring Seals | NBR | | | |
| 2 | Plate with Stem | Ductile Iron Gr 500-7 | | | |
| 3 | Bushing & O-Rings | Brass C48600 & NBR | | | |
| 4 | Gear Body | Ductile Iron Gr 500-7 | | | |
| 5 | Stems | Stainless Steel Gr 420 2Cr13 | | | |
| 6 | Gears | Heat Treated Steel 45 | | | |
| 7 | Annular Gear | Heat Treated Steel 45 | | | |
| 8 | O-Ring Seals | NBR | | | |
| 9 | Bonnet | Ductile Iron Gr 500-7 | | | |
| 10 | Bolts & Washers | Stainless Steel Gr 316 | | | |
| 11 | Main Stem | Stainless Steel Gr 431 | | | |
| 12 | Stem Key | Stainless Steel Gr 316 | | | |

INSTALLATION

The PGS02 gearbox can be installed onto a Betta gate valve model VGF or VGFB with compatible ISO F16 mounting flange as follows:

- Ensure the gate valve stem key is in position.
- Make sure the valve stem key and the keyway of the gearbox is in alignment.
- With a little force, lower the gearbox onto the valve stem until it is fully seated.
- Rotate the gearbox to align the mounting flange bolt
- 5. Insert mounting bolts & washers, and hand tighten.
- Torque each bolt in even increments to 200Nm.

OPERATING TORQUES

| | GATE VA | LVE | | GEA | VALVE WITH GEARBOX | |
|-----|-----------|------------------|--------|------------|------------------------|------------------|
| DN | SERIES | OPERATING TORQUE | SERIES | GEAR RATIO | MAX ALLOW INPUT TORQUE | OPERATING TORQUE |
| 450 | VGF, VGFB | 400 Nm | PGS02 | 4.16:1 | 450 Nm Max | 100 Nm |
| 500 | VGF, VGFB | 460 Nm | PGS02 | 4.16:1 | 500 Nm Max | 115 Nm |
| 600 | VGF, VGFB | 480 Nm | PGS02 | 4.16:1 | 600 Nm Max | 120 Nm |

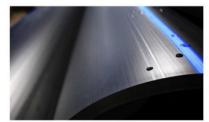


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