

GVP[®] VALVE

Resilient Soft Seated Gate Valve Series



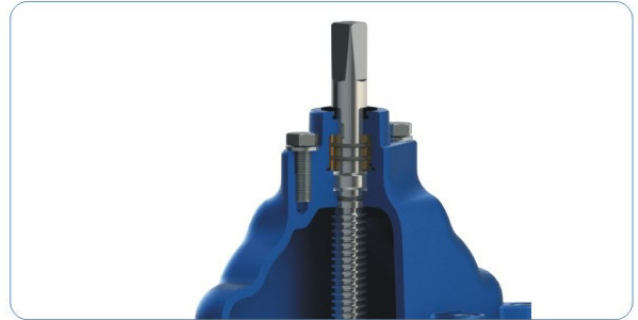
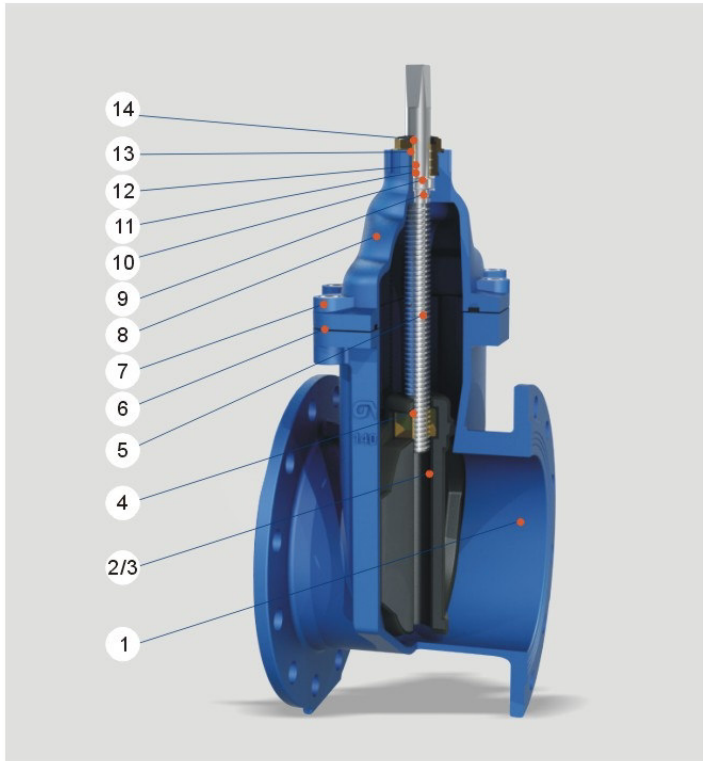
- **NRS Resilient Soft Seated Flange Gate Valve**
- **RS Resilient Soft Seated Flange Gate Valves**
- **NRS Resilient Soft Seated (PVC/PE/PIPE) Socket Gate Valves**
- **ANTI-THEFT NRS Resilient Soft Seated Gate Valves**
- **Electric Actuated NRS Resilient Soft Seated Gate Valves**

HYDRO ENGINEERING LLP
www.hydro.com.kz

RESILIENT SOFT SEATED GATE VALVE SERIES

NRS RESILIENT SOFT SEATED FLANGE GATE VALVES

DN40-DN1000 (DIN/BS), 2"-12" (ANSI)



APPLICATION STANDARDS

| | |
|----------------------------|---|
| Design standard | EN1171:2002 |
| Face to face | According to EN558-1 series 14 (DIN F4), series 15 (DIN F5), series 3 (BS5163) and ASME B16.10. |
| Flange drilling | According to EN1092 PN10-16, ASME B 16.1-16.5 |
| Size scope | DN40-DN1000 (DIN/BS), 2"-12" (ANSI) |
| Working temperature | NBR 0-70°C, EPDM 0-80°C |
| Working pressure | PN10-16, Class 125-150 |
| Suitable medium | Water |
| Coating | Epoxy coating with thickness $\geq 250\mu\text{m}$ |

PARTS LIST

| No. | Part name | Material |
|-----|-----------------|-------------------------------|
| 1 | Body | Ductile Iron |
| 2 | Wedge | Ductile Iron with EPDM/NBR |
| 3 | Guide collar | Nylon |
| 4 | Wedge nut | Brass |
| 5 | Stem | 2Cr13 |
| 6 | Gasket | NBR/EPDM |
| 7 | Bonnet bolt | Galvanized Carbon steel/SS304 |
| 8 | Bonnet | Ductile Iron |
| 9 | "O" ring | NBR |
| 10 | Locating washer | Nylon |
| 11 | Bushing | Brass |
| 12 | "O" ring | NBR |
| 13 | "O" ring | NBR |
| 14 | Dust ring | NBR/EPDM |

RESILIENT SOFT SEATED GATE VALVE SERIES

RS RESILIENT SOFT SEATED FLANGE GATE VALVES

DN50-DN300 (DIN/BS), 2"-12" (ANSI)



APPLICATION STANDARDS

| | |
|---------------------|---|
| Design standard | EN1171:2002 |
| Face to face | According to EN558-1 series 14 (DIN F4), series 3 (BS5163) and ASME B16.10. |
| Flange drilling | According to EN1092 PN10-16, ASME B 16.1-16.5 |
| Size scope | DN50-DN300 (DIN/BS), 2"-12" (ANSI) |
| Working temperature | NBR 0-70°C, EPDM 0-80°C |
| Working pressure | PN10-16, Class 125-150 |
| Suitable medium | Water |
| Coating | Epoxy coating with thickness $\geq 250\mu\text{m}$ |

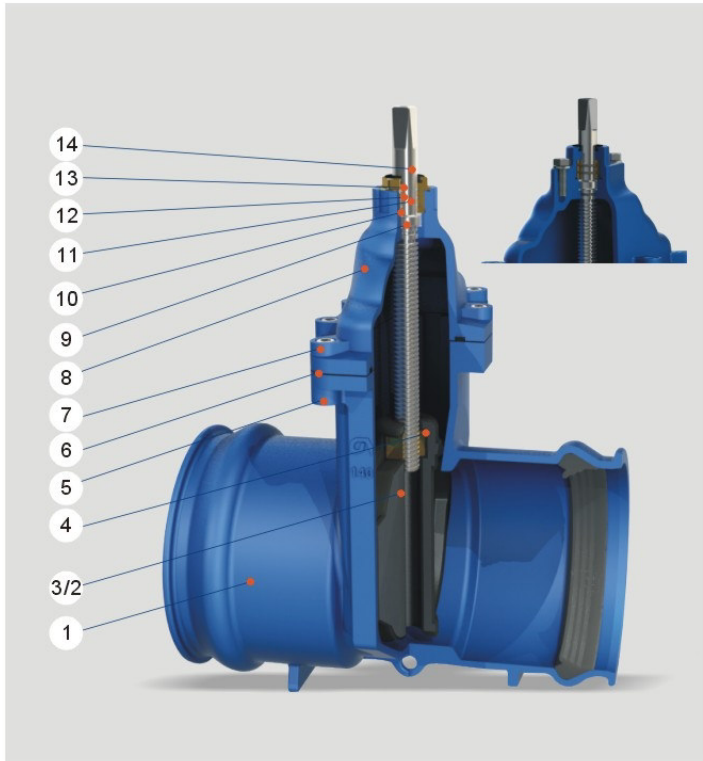
PARTS LIST

| No. | Part Name | Material |
|-----|-------------|-------------------------------|
| 1 | Body | Ductile Iron |
| 2 | Disc | Ductile Iron with NBR/EPDM |
| 3 | Disc nut | Brass |
| 4 | Stem | 2Cr13 |
| 5 | Gasket | NBR/EPDM |
| 6 | Bonnet bolt | Galvanized Carbon steel/SS304 |
| 7 | Bonnet | Ductile Iron |
| 8 | Filler | Graphit |
| 9 | "O"ring | NBR |
| 10 | Gland | Ductile Iron |
| 11 | Yoke | Ductile Iron |
| 12 | Blot | 2Cr13 |
| 13 | Nut | Brass |
| 14 | Nut | Ductile Iron |
| 15 | Handwheel | Ductile Iron |
| 16 | Nut | Brass |

RESILIENT SOFT SEATED GATE VALVE SERIES

NRS RESILIENT SOFT SEATED (PVC/PE PIPE) SOCKET GATE VALVES

DN50-DN300



APPLICATION STANDARDS

| | |
|---------------------|--|
| Design standard | EN1171:2002 |
| Socket standard | ISO4427:1996 (GB/T13663-2000) |
| Size scope | DN50-DN300 |
| Working temperature | NBR 0-70°C, EPDM 0-80°C |
| Working pressure | PN10-16 |
| Suitable medium | Water |
| Coating | Epoxy coating with thickness $\geq 250\mu\text{m}$ |

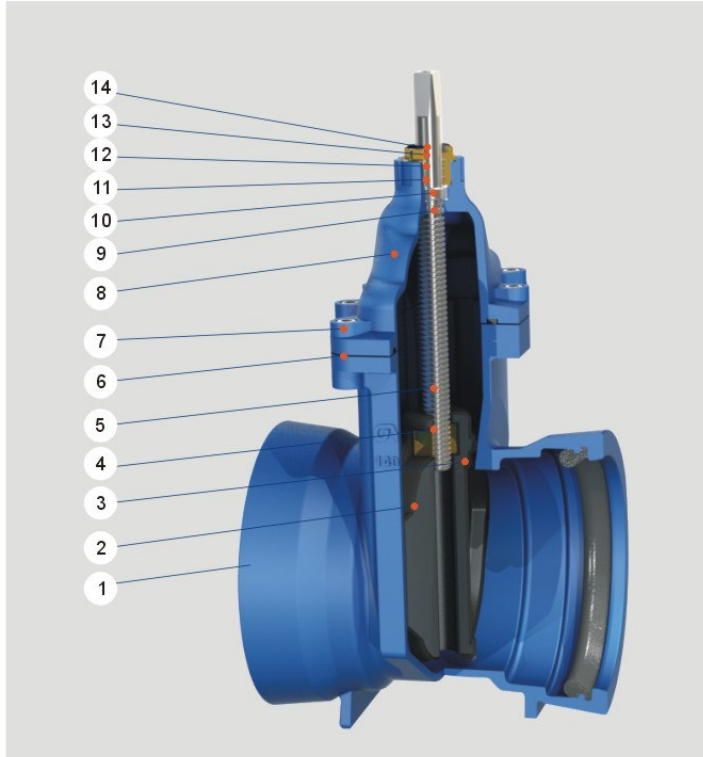
PARTS LIST

| No. | Part Name | Material |
|-----|-----------------|-------------------------------|
| 1 | Body | Ductile Iron |
| 2 | Disc | Ductile Iron with NBR/EPDM |
| 3 | Guide collar | Nylon |
| 4 | Disc nut | Brass |
| 5 | Stem | 2Cr13 |
| 6 | Gasket | NBR/EPDM |
| 7 | Bonnet bolt | Galvanized Carbon steel/SS304 |
| 8 | Bonnet | Ductile Iron |
| 9 | "O"ring | NBR |
| 10 | Locating washer | Nylon |
| 11 | Brass nut | Brass |
| 12 | "O"ring | NBR |
| 13 | "O"ring | NBR |
| 14 | Dust ring | EPDM |

RESILIENT SOFT SEATED GATE VALVE SERIES

NRS RESILIENT SOFT SEATED (DI PIPE) SOCKET GATE VALVES

DN80-DN400



APPLICATION STANDARDS

| | |
|---------------------|--|
| Design standard | EN1171:2002 |
| Socket standard | ISO2531:1998 (GB/T13295-2008) |
| Size scope | DN80-DN400 |
| Working temperature | NBR 0-70℃, EPDM 0-80℃ |
| Working pressure | PN10-16 |
| Suitable medium | Water |
| Coating | Epoxy coating with thickness $\geq 250\mu\text{m}$ |

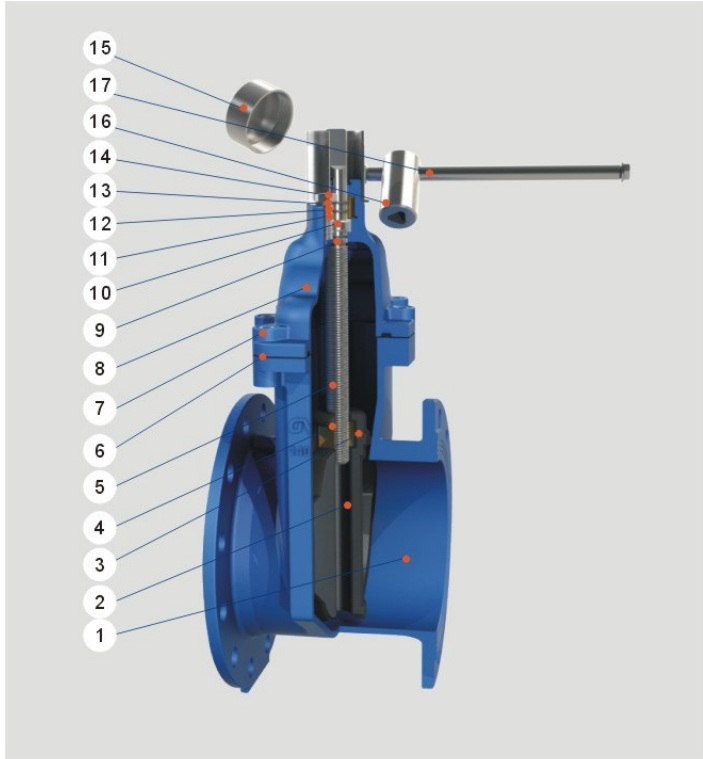
PARTS LIST

| No. | Part Name | Material |
|-----|-----------------|-------------------------------|
| 1 | Body | Ductile Iron |
| 2 | Disc | Ductile Iron with NBR/EPDM |
| 3 | Guide collar | Nylon |
| 4 | Disc nut | Brass |
| 5 | Stem | 2Cr13 |
| 6 | Gasket | NBR/EPDM |
| 7 | Bonnet bolt | Galvanized Carbon steel/SS304 |
| 8 | Bonnet | Ductile Iron |
| 9 | "O"ring | NBR |
| 10 | Locating washer | Nylon |
| 11 | Brass nut | Brass |
| 12 | "O"ring | NBR |
| 13 | "O"ring | NBR |
| 14 | Dust ring | EPDM |

RESILIENT SOFT SEATED GATE VALVE SERIES

ANTI-THEFT NRS RESILIENT SOFT SEATED GATE VALVES

DN80-DN400 (DIN/BS), 3"-12" (ANSI)



Magnetic anti-theft



APPLICATION STANDARDS

| | |
|---------------------|---|
| Design standard | EN1171:2002 |
| Face to face | According to EN558-1 series 14 (DIN F4), series 15 (DIN F5), series 3 (BS5163) and ASME B16.10. |
| Flange drilling | According to EN1092 PN10-16, ASME B 16.1-16.5 |
| Size scope | DN80-DN400 (DIN/BS), 3"-12" (ANSI) |
| Working temperature | NBR 0-70°C, EPDM 0-80°C |
| Working pressure | PN10-16, Class 125-150 |
| Suitable medium | Water |
| Coating | Epoxy coating with thickness $\geq 250\mu\text{m}$ |

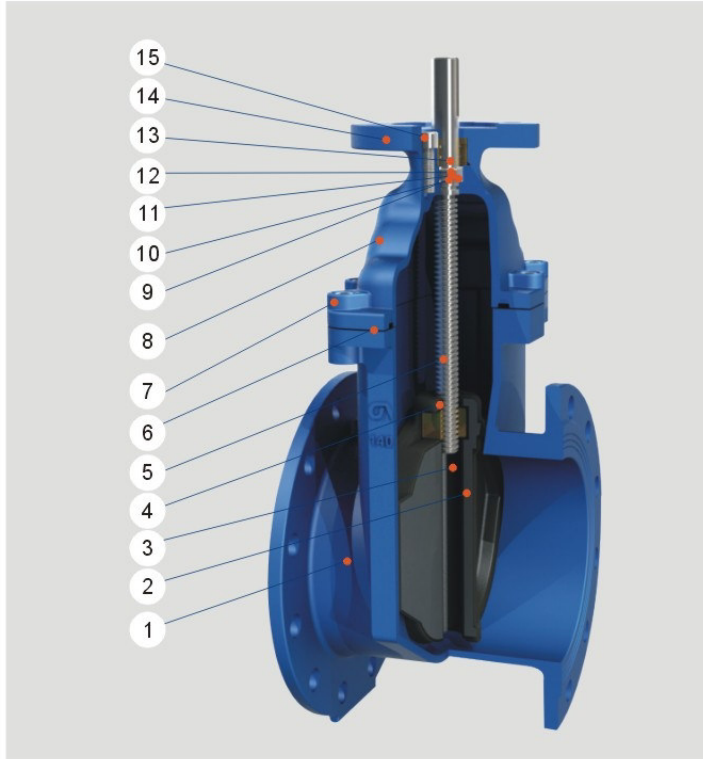
PARTS LIST

| No. | Part name | Material |
|-----|------------------|-------------------------------|
| 1 | Body | Ductile Iron |
| 2 | Wedge | Ductile Iron with EPDM/NBR |
| 3 | Guide collar | Nylon |
| 4 | Wedge nut | Brass |
| 5 | Stem | 2Cr13 |
| 6 | Gasket | NBR/EPDM |
| 7 | Bonnet bolt | Galvanized Carbon steel/SS304 |
| 8 | Bonnet | Ductile Iron |
| 9 | "O" ring | NBR |
| 10 | Locating washer | Nylon |
| 11 | Bushing | Brass |
| 12 | "O" ring | NBR |
| 13 | "O" ring | NBR |
| 14 | Dust ring | EPDM |
| 15 | Theftproof cap | 2Cr13 |
| 16 | Theftproof cover | 2Cr13 |
| 17 | Theftproof lever | 2Cr13 |

RESILIENT SOFT SEATED GATE VALVE SERIES

ELECTRIC ACTUATED NRS RESILIENT SOFT SEATED GATE VALVES

DN40-DN1000 (DIN/BS), 2"-12" (ANSI)



APPLICATION STANDARDS

| | |
|---------------------|---|
| Design standard | EN1171:2002 |
| Face to face | According to EN558-1 series 14 (DIN F4), series 15 (DIN F5), series 3 (BS5163) and ASME B16.10. |
| Flange drilling | According to EN1092 PN10-16, ASME B 16.1-16.5 |
| Size scope | DN40-DN1000 (DIN/BS), 2"-12" (ANSI) |
| Working temperature | NBR 0-70°C, EPDM 0-80°C |
| Working pressure | PN10-16, Class 125-150 |
| Suitable medium | Water |
| Coating | Epoxy coating with thickness $\geq 250\mu\text{m}$ |

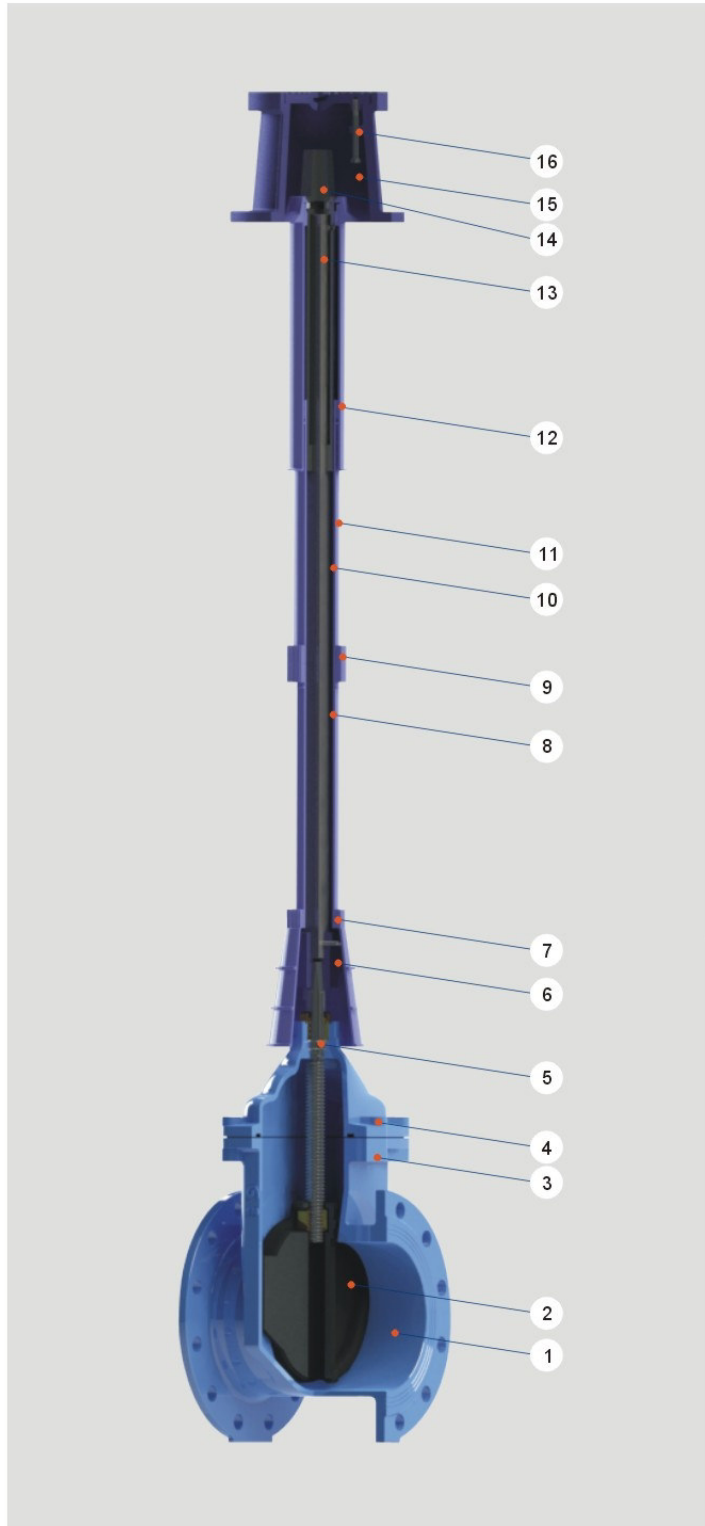
PARTS LIST

| No. | Part Name | Material |
|-----|-----------------|-------------------------------|
| 1 | Body | Ductile Iron |
| 2 | Disc | Ductile Iron with NBR/EPDM |
| 3 | Guide collar | Nylon |
| 4 | Disc nut | Brass |
| 5 | Stem | 2Cr13 |
| 6 | Gasket | NBR/EPDM |
| 7 | Bonnet bolt | Galvanized Carbon steel/SS304 |
| 8 | Bonnet | Ductile Iron |
| 9 | "O" ring | NBR |
| 10 | Locating washer | Nylon |
| 11 | Locking | Brass |
| 12 | "O" ring | NBR |
| 13 | Bushing | Brass |
| 14 | Top flange | Ductile Iron |
| 15 | Bolt | 2Cr13 |

RESILIENT SOFT SEATED GATE VALVE SERIES

GATE VALVES WITH EXTENSION SPINDLE

DN40-DN1000 (DIN/BS), 2"-12" (ANSI)



APPLICATION STANDARDS

| | |
|---------------------|---|
| Design standard | EN1171:2002 |
| Face to face | According to EN558-1 series 14 (DIN F4), series 15 (DIN F5), series 3 (BS5163) and ASME B16.10. |
| Flange drilling | According to EN1092 PN10-16, ASME B 16.1-16.5 |
| Size scope | DN40-DN1000 (DIN/BS), 2"-12" (ANSI) |
| Working temperature | NBR 0-70°C, EPDM 0-80°C |
| Working pressure | PN10-16, Class 125-150 |
| Suitable medium | Water |
| Coating | Epoxy coating with thickness $\geq 250\mu\text{m}$ |

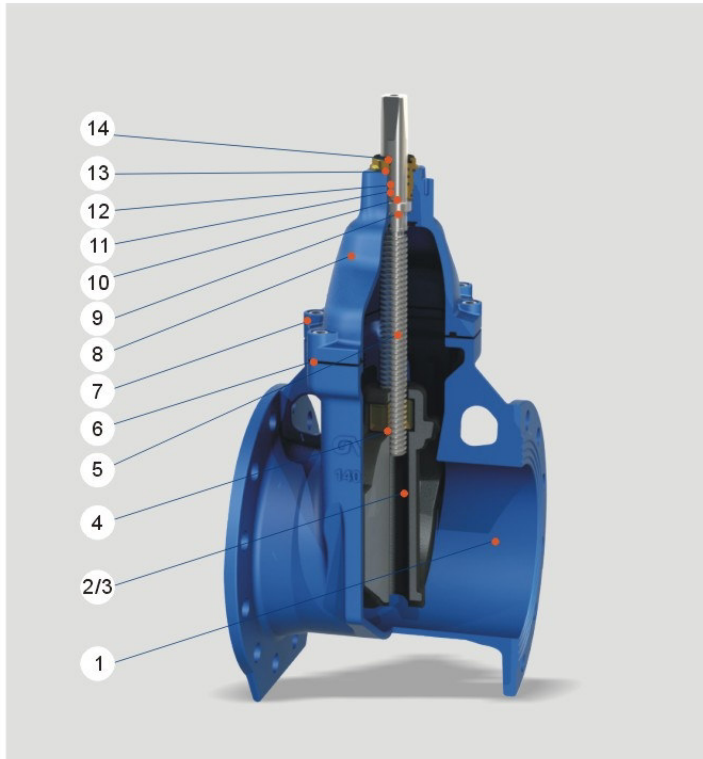
PARTS LIST

| No. | Part name | Material |
|-----|----------------------|----------------------------|
| 1 | Body | Ductile Iron |
| 2 | Wedge | Ductile Iron with NBR/EPDM |
| 3 | Bonnet | Ductile Iron |
| 4 | Gland | Ductile Iron |
| 5 | Stem | 2Cr13 |
| 6 | Gland cover | HDPE |
| 7 | Connecting shaft | Galvanized nickel alloy |
| 8 | Lower retaining tube | PVC/PE |
| 9 | Protective sleeve | HDPE |
| 10 | Annular tube | Galvanized nickel alloy |
| 11 | Upper retaining tube | PVC/PE |
| 12 | Guide shaft tube | Galvanized nickel alloy |
| 13 | Square shaft | Galvanized nickel alloy |
| 14 | Rotary shaft | Galvanized nickel alloy |
| 15 | Box | Ductile Iron |
| 16 | Box cover | Ductile Iron |

RESILIENT SOFT SEATED GATE VALVE SERIES

HEAVY TYPE NRS RESILIENT SOFT SEATED FLANGE GATE VALVES

DN50-DN300



WITH POSITION INDICATOR



APPLICATION STANDARDS

| | |
|---------------------|--|
| Design standard | EN1171:2002 |
| Face to face | According to EN558-1 series 3 (BS5163) and 14 (DIN F4) |
| Flange drilling | According to EN1092 PN10-16 |
| Size scope | DN50-DN300 |
| Working temperature | NBR 0-70°C, EPDM 0-80°C |
| Working pressure | PN10-16 |
| Suitable medium | Water |
| Coating | Epoxy coating with thickness $\geq 250\mu\text{m}$ |

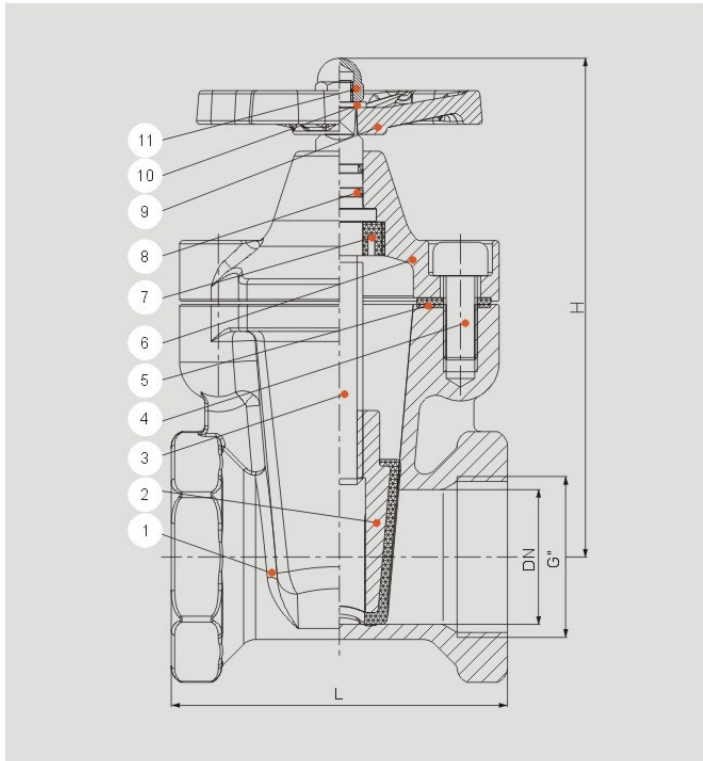
PARTS LIST

| No. | Part name | Material |
|-----|-----------------|-------------------------------|
| 1 | Body | Ductile Iron |
| 2 | Wedge | Ductile Iron with EPDM/NBR |
| 3 | Guide collar | Nylon |
| 4 | Wedge nut | Brass |
| 5 | Stem | 2Cr13 |
| 6 | Gasket | NBR/EPDM |
| 7 | Bonnet bolt | Galvanized Carbon steel/SS304 |
| 8 | Bonnet | Ductile Iron |
| 9 | "O" ring | MBR |
| 10 | Locating washer | Nylon |
| 11 | Bushing | Brass |
| 12 | "O" ring | NBR |
| 13 | "O" ring | NBR |
| 14 | Dust ring | NBR/EPDM |

RESILIENT SOFT SEATED GATE VALVE SERIES

SERVICE VALVES

DN15-DN50



APPLICATION STANDARDS

| | |
|---------------------|--|
| Design standard | GB/T24924 |
| Connection | According G or NPT |
| Size scope | DN15-DN50 |
| Working temperature | NBR 0-70°C, EPDM 0-80°C |
| Working pressure | PN10-16 |
| Suitable medium | Water |
| Coating | Epoxy coating with thickness $\geq 250\mu\text{m}$ |

PARTS LIST

| No. | Part name | Material |
|-----|-----------------|----------------------------|
| 1 | Body | Ductile Iron |
| 2 | Wedge | Ductile Iron with NBR/EPDM |
| 3 | Stem | 2Cr13 |
| 4 | Gasket | NBR/EPDM |
| 5 | Bonnet bolt | Galvanized steel/SS304 |
| 6 | Bonnet | Ductile Iron |
| 7 | Locating washer | Nylon |
| 8 | "o"ring | NBR |
| 9 | Handwheel | Carbon steel |
| 10 | Washer | Stainless steel |
| 11 | Cap screw | Stainless steel |

DIMENSIONS

| DN | L | H | G" |
|----|----|-----|--------|
| 20 | 70 | 96 | 3/4" |
| 25 | 80 | 110 | 1" |
| 32 | 90 | 130 | 1 1/4" |

| DN | L | H | G" |
|----|-----|-----|--------|
| 40 | 100 | 150 | 1 1/2" |
| 50 | 110 | 180 | 2" |

RESILIENT SOFT SEATED GATE VALVE SERIES

ACCESSORIES

HANDWHEELS

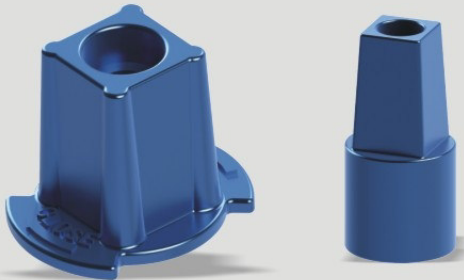


| DN | DN50 | DN65 | DN80 | DN100 | DN125 | DN150 | DN200 | DN250 | DN300 |
|--------------------------|------|------|------|-------|-------|-------|-------|-------|-------|
| Dia. of casted handwheel | 180 | 180 | 200 | 250 | 280 | 280 | 340 | 340 | 400 |
| Dia. of steel handwheel | 180 | 180 | 200 | 250 | 280 | 280 | 340 | 400 | 400 |

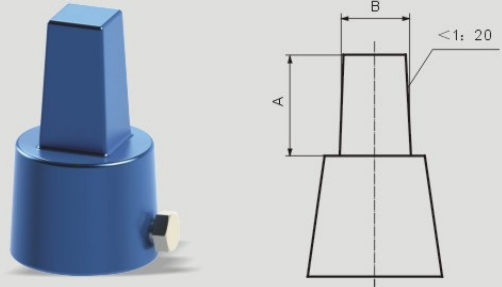
| DN | DN350 | DN400 | DN500 | DN600 | DN700 | DN800 | DN900 | DN1000 |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|--------|
| Dia. of casted handwheel | 450 | 450 | 600 | 600 | 600 | 600 | 600 | 600 |
| Dia. of steel handwheel | * | * | * | * | * | * | * | * |

DIN STANDARD CAPS

Square sizes: 32mm*32mm



BS5163 STANDARD CAPS



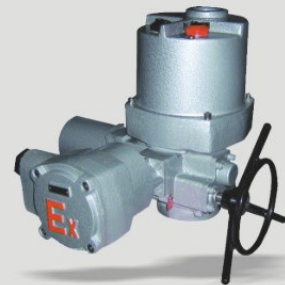
| DN | A | B |
|---------------------------------|----|----|
| 50, 80, 100, 150, 200, 250, 300 | 63 | 35 |
| 400, 500, 600, 700, 800 | 75 | 48 |

AMERICAN STANDARD CAPS

GEAR-BOX

ELECTRIC ACTUATOR

Square sizes: 2"*2"

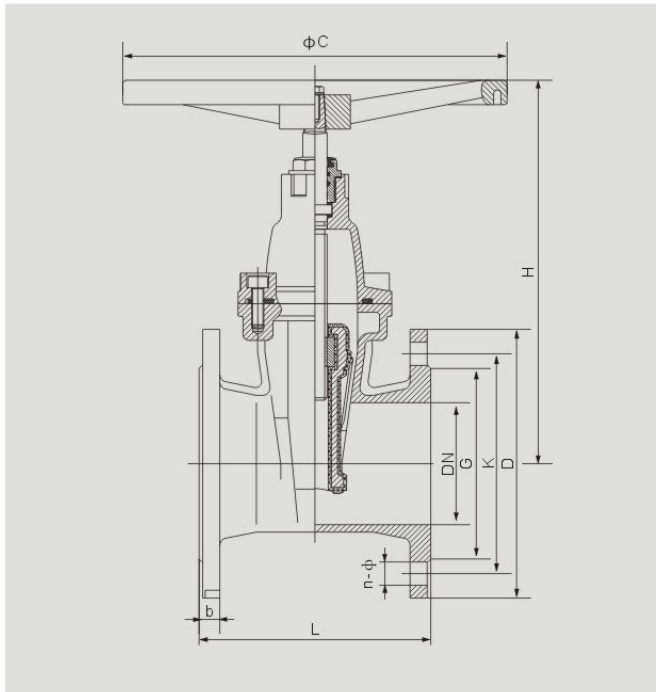


RESILIENT SOFT SEATED GATE VALVE SERIES

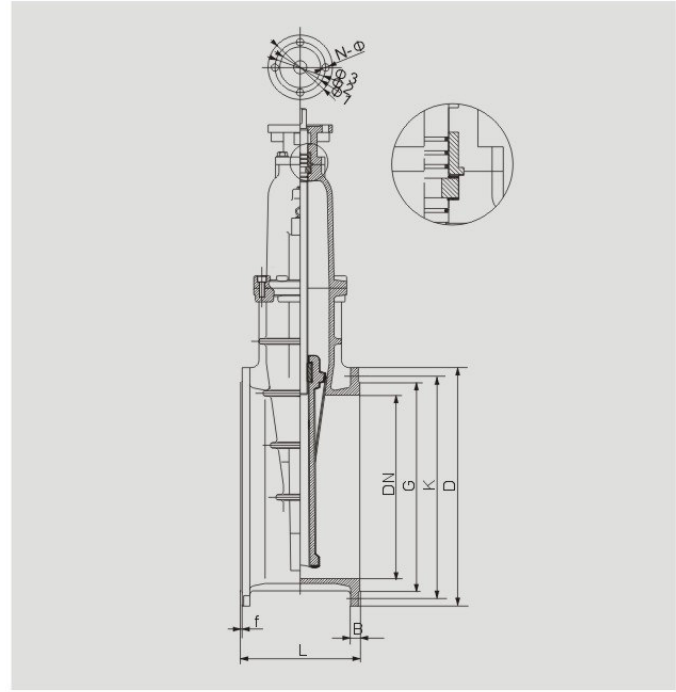
DIMENSIONS

DIN F4/F5 BS 5163

DN50-DN300



DN350-DN1000



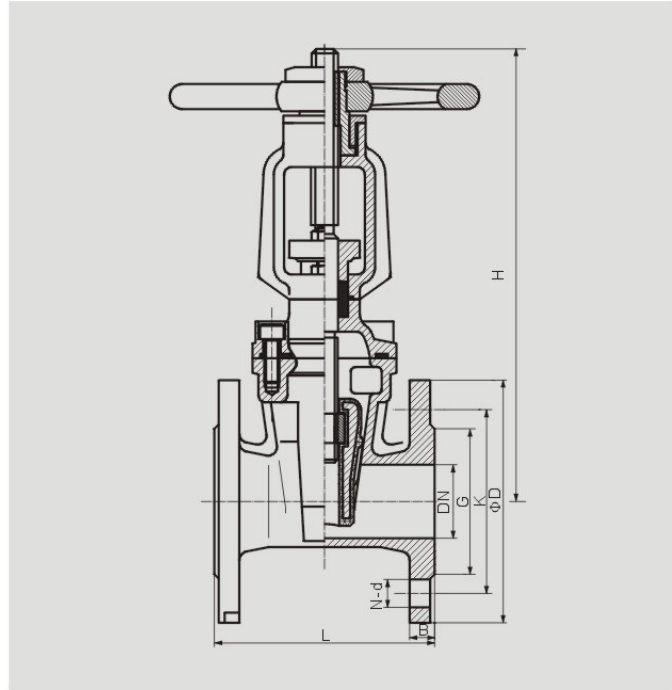
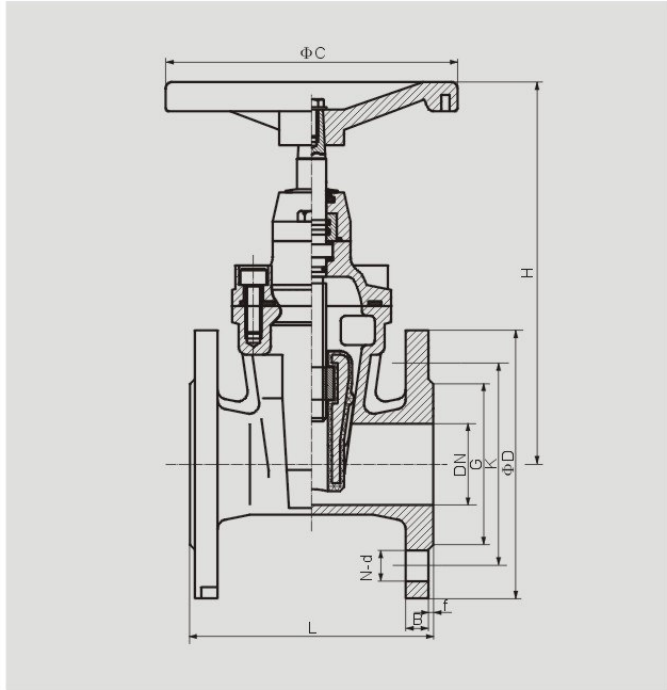
DIMENSIONS

| DN | | L | | | D | | K | | G | | f | n-φ d | | B | |
|-----|------|-----|------|--------|------|------|------|------|----------------|-----------------|-----------------|-----------------|------|------|------|
| | | DIN | | BS5163 | PN10 | PN16 | PN10 | PN16 | PN10 | PN16 | | PN10 | PN16 | PN10 | PN16 |
| | | F4 | F5 | BS | | | | | | | | | | | |
| 2 | 50 | 150 | 250 | 178 | 165 | 125 | 99 | 3 | 4-19 | 19 | | | | | |
| 2.5 | 65 | 170 | 270 | 190 | 185 | 145 | 118 | 3 | 4-19 | 19 | | | | | |
| 3 | 80 | 180 | 280 | 203 | 200 | 160 | 132 | 3 | 8-19 | 19 | | | | | |
| 4 | 100 | 190 | 300 | 229 | 220 | 180 | 156 | 3 | 8-19 | 19 | | | | | |
| 5 | 125 | 200 | 325 | 254 | 250 | 210 | 184 | 3 | 8-19 | 19 | | | | | |
| 6 | 150 | 210 | 350 | 267 | 285 | 240 | 211 | 3 | 8-23 | 19 | | | | | |
| 8 | 200 | 230 | 400 | 292 | 340 | 295 | 266 | 3 | 8-φ 23 12-φ 23 | 20 | | | | | |
| 10 | 250 | 250 | 450 | 330 | 395 | 405 | 350 | 355 | 319 | 3 | 12-φ 23 12-φ 28 | 22 | | | |
| 12 | 300 | 270 | 500 | 356 | 445 | 460 | 400 | 410 | 370 | 4 | 12-φ 23 12-φ 28 | 24.5 | | | |
| 14 | 350 | 290 | 550 | 381 | 505 | 520 | 460 | 470 | 429 | 4 | 16-φ 23 16-φ 28 | 24.5 | 26.5 | | |
| 16 | 400 | 310 | 600 | 406 | 565 | 580 | 515 | 525 | 480 | 4 | 16-φ 28 16-φ 31 | 24.5 | 28 | | |
| 18 | 450 | 330 | 650 | 432 | 615 | 640 | 565 | 585 | 530 | 548 | 4 | 20-φ 28 20-φ 31 | 25.5 | 30 | |
| 20 | 500 | 350 | 700 | 457 | 670 | 715 | 620 | 650 | 582 | 609 | 4 | 20-φ 28 20-φ 34 | 26.5 | 31.5 | |
| 24 | 600 | 390 | 800 | 508 | 780 | 840 | 725 | 770 | 682 | 720 | 5 | 20-φ 31 20-φ 37 | 30 | 36 | |
| 28 | 700 | 430 | 900 | 610 | 895 | 910 | 840 | 794 | 5 | 24-φ 31 24-φ 37 | 32.5 | 39.5 | | | |
| 32 | 800 | 470 | 1000 | 660 | 1015 | 1025 | 950 | 901 | 5 | 24-φ 34 24-φ 41 | 35 | 43 | | | |
| 36 | 900 | 510 | 1100 | 711 | 1115 | 1125 | 1050 | 1001 | 5 | 28-φ 34 28-φ 41 | 37.5 | 46.5 | | | |
| 40 | 1000 | 550 | 1200 | 813 | 1230 | 1255 | 1160 | 1170 | 1112 | 5 | 28-φ 37 28-φ 44 | 40 | 50 | | |

RESILIENT SOFT SEATED GATE VALVE SERIES

DIMENSIONS ANSI

DN50-DN300 DN50-DN300



DIMENSIONS NON-RISING STEM RESILIENT

| DN | L | (H) | | C | D | B | | f | | K | G | | n-d | □S |
|------|-----|----------------|-----------------|-----|-----|------|------|-----|-----|-------|-----|-----|--------|----|
| | | iron handwheel | steel handwheel | | | 125 | 150 | 125 | 150 | | 125 | 150 | | |
| 2" | 178 | 235.5 | 248.5 | 180 | 152 | 15.9 | 14.3 | | 2 | 120.5 | | 92 | 4-Φ19 | 14 |
| 2.5" | 190 | 258 | 274 | 180 | 178 | 17.5 | 15.9 | | 2 | 139.5 | | 105 | 4-Φ19 | 14 |
| 3" | 203 | 288.5 | 301.5 | 200 | 191 | 19.1 | 17.5 | | 2 | 152. | | 127 | 4-Φ19 | 15 |
| 4" | 229 | 319 | 332 | 250 | 229 | 23.9 | 22.3 | | 2 | 190.5 | | 157 | 8-Φ19 | 15 |
| 5" | 254 | 360.5 | 377.5 | 280 | 254 | 23.9 | 22.3 | | 2 | 216.5 | | 186 | 8-Φ22 | 19 |
| 6" | 267 | 398 | 415 | 280 | 279 | 25.4 | 23.9 | | 2 | 241.5 | | 216 | 8-Φ22 | 19 |
| 8" | 292 | 509 | 533 | 340 | 343 | 28.6 | 27 | | 2 | 298.5 | | 270 | 8-Φ22 | 19 |
| 10" | 330 | 608 | 645 | 340 | 406 | 30.2 | 28.6 | | 2 | 362 | | 324 | 12-Φ25 | 24 |
| 12" | 356 | 683 | 715 | 400 | 483 | 31.8 | 30.2 | | 2 | 432 | | 381 | 12-Φ25 | 27 |

RISING STEM RESILIENT

| DN | L | (H) | C | D | B | | f | | K | G | | n-d |
|------|-----|----------------|-----|-----|------|------|-----|-----|-------|-----|-----|--------|
| | | iron handwheel | | | 125 | 150 | 125 | 150 | | 125 | 150 | |
| 2" | 178 | 327 | 178 | 152 | 15.9 | 14.3 | | 2 | 120.5 | | 92 | 4-Φ19 |
| 2.5" | 190 | 368 | 178 | 178 | 17.5 | 15.9 | | 2 | 139.5 | | 105 | 4-Φ19 |
| 3" | 203 | 405 | 203 | 191 | 19.1 | 17.5 | | 2 | 152.5 | | 127 | 4-Φ19 |
| 4" | 229 | 452 | 254 | 229 | 23.9 | 22.3 | | 2 | 190.5 | | 157 | 8-Φ19 |
| 5" | 254 | 610 | 254 | 254 | 23.9 | 22.3 | | 2 | 216.5 | | 186 | 8-Φ22 |
| 6" | 267 | 615 | 305 | 279 | 25.4 | 23.9 | | 2 | 241.5 | | 216 | 8-Φ22 |
| 8" | 292 | 775 | 356 | 343 | 28.6 | 27 | | 2 | 298.5 | | 270 | 8-Φ22 |
| 10" | 330 | 900 | 405 | 406 | 30.2 | 28.6 | | 2 | 362 | | 324 | 12-Φ25 |
| 12" | 356 | 1008 | 457 | 483 | 31.8 | 30.2 | | 2 | 432 | | 381 | 12-Φ25 |