

ALFRANTM

Non-Rising Stem Resilient Seated Gate Valve To BS5163

Introduction

Alfran Non-Rising Stem Resilient Seated Gate Valve is designed and manufactured to comply with BS5163 specifications & requirements. Alfran gate valves not only attracts the eyes of our customers but also guarantees a bubble-tight shut-off in pipelines in which it is installed. These RS gate valves have the following special features and available from 50mm to 300mm.

Main Features

Fully Encapsulated Wedge

The wedge is fully encapsulated with vulcanized EPDM, specially compounded for long life, durability & protection against corrosion. There is no exposed iron.

Bubble-Tight Shut-Off

A single resilient seal is formed between the fully encapsulated resilient wedge & the valve body to guarantee bubble-tight shut-off every time.

Superior Epoxy Coating

The entire valve body & bonnet, inside and out, are fully coated with fusion bonded powder epoxy coating that protect them against corrosion & prevent tuberculation & scale buildup.

"O" - Ring Stem Seals and Dirt Seal

The unique design allow all the "O"- Rings to be easily replaced in the line while the valve is under pressure in the open position. Additional "O"- Ring under the thrust collar is available upon request.

Stainless Steel Stem and Thrust Collar

This time tested design has two thrust washers and repeatedly proven its superior strength over cast items. Stainless steel stem having left-hand rolled, ACME tread with ISO-metric trapezoidal profile. The shaft end is also burnished.

Bronze Stem Nut Hydro-static Test

The bronze stem nut is electrically-isolated from the iron in the wedge for corrosion resistance. The nut is held tightly in place to resist stem binding.



Full Round, Smooth Bottom Flow Way

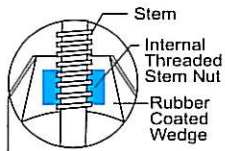
The bottom has no grooves or recesses that can collect sediment or debris and compromise the seal. Accommodates full-size shell cutter with ample clearance during tapping operations.

Integral legs

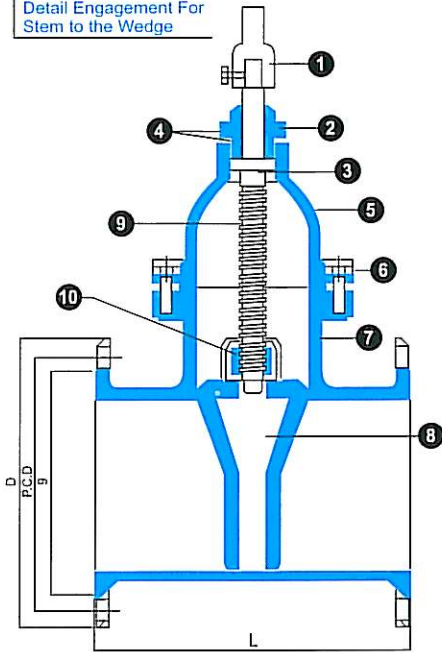
Flat cast at the bottom of the valve body let the valve stand upright in storage or during installation.

| Pressure Rating | Hydro-static Test | |
|-----------------|-------------------|----------|
| | Shell | Seat |
| PN6 | 6.6bars | 9.0bars |
| PN10 | 11.0bars | 15.0bars |
| PN16 | 17.6bars | 24.0bars |
| PN25 | 27.5bars | 37.5bars |

* Alfran gate valves are 100% hydro-static tested strictly accordance to BS6755 and EN-12266-3

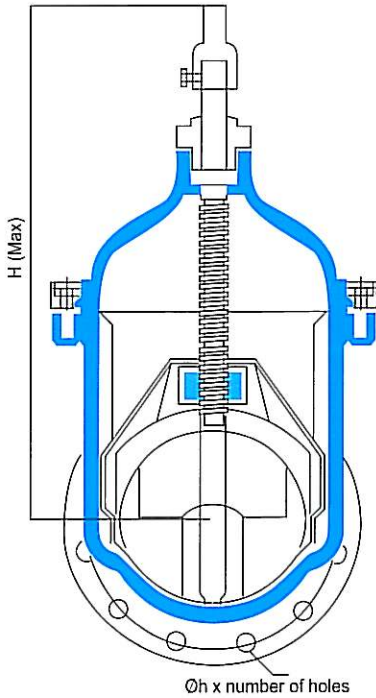


Detail Engagement For Stem to the Wedge



Basic Materials

| ITEM | COMPONENT | MATERIAL | BS REFERENCE | GRADE OR DESIGNATION |
|------|---------------|--------------------------|-------------------|------------------------|
| 1 | Cap | Cast Iron / Ductile Iron | BS 1452 / BS 2789 | "220 / 420/12, 500/17" |
| 2 | Gland | Alloy (Gun Metal) | BS 1400 | LG2 |
| 3 | Thrust Washer | Acetel Resin | | Nylon Type 66 |
| 4 | "O" Ring | Synthetic Rubber | BS 2494 | EPDM |
| 5 | Bonnet | Cast Iron / Ductile Iron | BS 1452 / BS 2789 | "220 / 420/12, 500/17" |
| 6 | Bolt & Nut | Steel | BS 4190 / BS 970 | Zinc Plated / G304 |
| 7 | Body | Cast Iron / Ductile Iron | BS 1452 / BS 2789 | "220 / 420/12, 500/17" |
| 8 | Wedge | Cast Iron / Ductile Iron | BS 1452 / BS 2789 | "220 / 420/12, 500/17" |
| | | Synthetic Rubber | BS 2494 | EPDM |
| 9 | Stem | Stainless Steel | BS 970 Part 1 | 431S29 |
| 10 | Stem Nut | Alloy (Gun Metal) | BS 1400 | LG2 |



Flange to BS 4504 Section 3.2 PN16

Unit : mm

| DN | | 50 | 80 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | |
|----------------------------|-----------|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| Face - to - face Dimension | L | 178 | 203 | 229 | 267 | 292 | 330 | 356 | 381 | 406 | 432 | 457 | 508 | |
| | + - | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | |
| Outside Dia. (D) | | 165 | 200 | 220 | 185 | 340 | 400 | 455 | 520 | 580 | 640 | 715 | 840 | |
| Raise Face Dia. (g) | | 103 | 138 | 158 | 212 | 264 | 319 | 367 | 432 | 484 | 548 | 606 | 721 | |
| Bolt Holes | P.C.D | 125 | 160 | 180 | 240 | 295 | 355 | 410 | 40 | 525 | 585 | 650 | 770 | |
| | No. | 4 | 8 | 8 | 8 | 12 | 12 | 12 | 16 | 16 | 20 | 20 | 20 | |
| | h | 19 | 19 | 19 | 23 | 23 | 28 | 28 | 26 | 30 | 30 | 3 | 36 | |
| Bolt Designation | | M16 | M16 | M16 | M20 | M20 | M24 | M24 | M24 | M27 | M27 | M30 | M33 | |
| Thickness | Ductile | t | 16.0 | 16.0 | 16.0 | 17.0 | 17.0 | 19.0 | 20.5 | 22.5 | 24.0 | 26.0 | 27.5 | 31.0 |
| | | f | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 |
| | Grey Cast | t | 7.0 | 19.0 | 21.0 | 23.0 | 27.0 | 29.0 | 28.0 | 36.0 | 38.0 | 40.0 | 42.0 | 48.0 |
| | | f | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 |
| Height (H) | | 330 | 360 | 385 | 510 | 615 | 690 | 790 | 950 | 1050 | 1150 | 1250 | 1500 | |
| Turn / Stroke (Round) | | 4.0 | 6.5 | 8.0 | 12.0 | 16.0 | 20.0 | 24.0 | 31.0 | 33.0 | 35.0 | 37.0 | 41.0 | |
| Weight (kg) | | 24 | 28 | 31 | 56 | 85 | 125 | 180 | 472 | 600 | 780 | 980 | 1380 | |

In the interest of product development, the designs & dimensions are subject to change without prior notification.