

# RESILIENT SEAL GATE VALVES



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### SABS 664 FLANGED & SPIGOT ENDS. SIZES: 50 - 250mm

The Right 16 resilient seal gate valve is the most widely used valve of its type for water reticulation service in Europe. It conforms dimensionally to SABS 664 Class 16. The resilient seal gate valve is called for in 90 percent of waterworks applications in Europe. The reason for this can be seen in the features as illustrated.

**Seating:** Uniform contact between body and gate at every point ensures even compression of the rubber, guaranteeing a complete seal. The profile of the sealing surfaces is designed to eliminate wear on the seat faces as the gate closes. The sealing angle is constant and there is no sliding contact between faces in contact, eliminating any shearing, tearing or wearing of the rubber seal. The resilient seal accommodates body distortion resulting from pressure or pipe stresses, and offers drop-tight seal over the whole range of pressures.

**Maintenance:** Gland repacking is eliminated by the use of the nylon seal bush supporting spindle seal O-rings. With the valve in the 'Full-Open' position, a positive back seal is effected, enabling the spindle seals to be replaced with the valve under pressure. The bonnet is secured to the cover by two set screws and the whole assembly can be replaced within two minutes. Valve gates can be replaced without removing the body from the pipeline. All gates of the same size are interchangeable without "matching".

## ADVANTAGES

**Positive shut-off:** Positive tight shut-off over the whole range of pressures.

**Reduced operational torque:** Low gland friction reduces operating torque. The polished stainless steel spindle is supported in the nylon housing bush and sealed by two O-rings. By eliminating the conventional stuffing box the spindle torque is reduced by 30 percent.

**Convenient installation:** The gate is positively guided by gate tongues located in grooves in the body which, together with the nylon bush guiding the spindle in the upper housing, permits installation of the valve in vertical, horizontal and inclined piping.

**No reduction gearing needed:** Due to the low sealing and gland friction torque, all valves in this series can be operated against a full differential pressure of 1/6MPa without the use of reduction gearing.

**No pockets:** The smooth straight-through body passage reduces head loss to little more than that of a straight pipe of the same length and diameter. There are no recesses in the body where solids can lodge, and gate sealing flanges are unaffected by solids in suspension.

**Interchange ability:** Supplied to SABS 664 dimensions, the valves are completely interchangeable in the pipeline with wedge gate valves of the same size. Flanged, spigot and socket end body configurations permit use of the valve with steel, asbestos cement and uPVC piping.

**Minimal maintenance:** The valve gate and spindle seal assembly can be changed in less than five minutes without removing the valve from the pipeline.

**Chemical resistant:** The stainless steel spindle is impervious to chemical attack from chemicals used in water treatment.

**Lining:** Simple, clean lines of the internal body configuration.

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## MANUAL OPERATION

The table below indicates the differential pressure in kPa against which Right valves can be closed using standard mechanisms. The figures are based on the application by one man exerting an effort of 200 Newton's simultaneously with each hand on the rim of a standard hand wheel. In all cases spindle threads are single-start 12.7mm pitch. For waterworks service, Right valves can be operated up to the full differential pressure of 1.6MPa using a standard Tee key without reduction gearing.

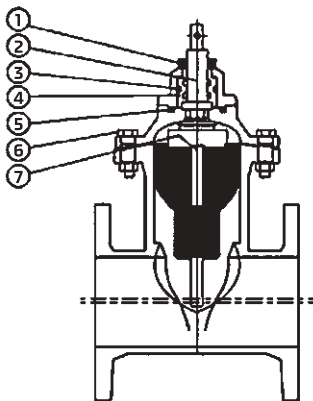


VALVE SIZE (mm)	DIFFERENTIAL kPa						
	50	80	100	150	200	250	300
kPa	1600	1600	1600	1520	750	585	585

## ELECTRIC OPERATION

The table below indicates the torque required in Newton meters to overcome the full differential pressure of 1.6MPa across the valve.

VALVE SIZE (mm)	TORQUE N.m						
	50	80	100	150	200	250	300
N.m	50	50	60	80	200	250	250



1. Protective wiper ring.
2. Inside screw spindle.
3. O-ring seal.
4. Housing bush.
5. Bonnet and cover seals
6. Through bolts.
7. Gate guides.

