

SEGURO

A RUBBER SEALED GATE VALVE

Technical Information

Rising stem valves with outside stem and yoke (OS &Y)

On these valves the stem passage are designed as follows:

A brass bushing, which serves as a guide for the stem, is pressed into lower end of the yoke. This bushing is machined to contain the stem packing. (Fig 6)

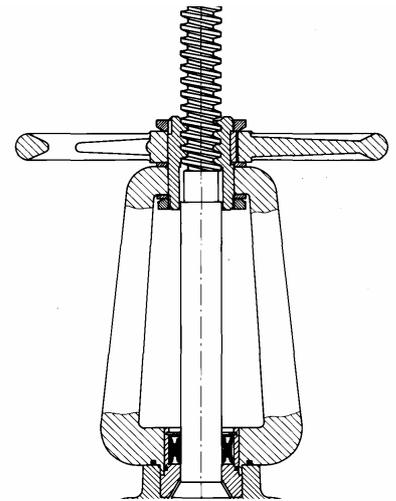
The stem seal is a self-tightening U-cup seal, and is secured by a stainless steel locking ring. The yoke is bolted to the bonnet on all sizes.

The stem thread used is trapezoid.

If the valve is with hand wheel, this is mounted on a brass nut at the top of the yoke. This nut is kept in place by two ring-nuts, one over the hand wheel and one inside the yoke opening.

In case of an actuator or a reduction gear is used; the thread is cut in the insert bushing of the actuator. The yoke will then be equipped with a standard flange (ISO 5210) at the top.

Fig. 6

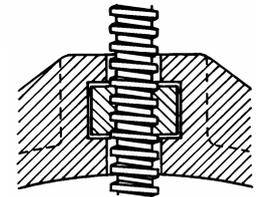


Stem nut

The standard material is brass, but the nut is also available in bronze or cast iron for improved corrosion resistance. The stem nut is loosely fitted into the pressure piece to prevent radial load of the stem. (Fig 7)

In the valves with OS&Y, a screw in the stem nut prevents the stem from rotating.

Fig. 7



Wedge

The wedge (or gate) consists of half shells (bolted together with stainless steel bolts), a pressure piece and the rubber seal.

When assembled, the two halves and the pressure piece form a groove in which the rubber seal is retained and protected.

Projections are cast on the bottom of the wedge, these acts as a stop and prevent overloading of the rubber seal. The valve cannot be over seated. A drain hole is provided in the bottom of the seal to prevent stagnation of water. (Fig 8)

The wedge is shown as it is about to be seated. Note that the seal touches the bottom of the port area as well as the vertical walls of the valve body, there are no projections. (Fig. 9)

The valve is now fully seated and closed tight. Note that the seal is firmly pressed against the bottom of the valve passage, and the pressure piece has forced the seal radial outward, effectively sealing the vertical walls of the valve. (Fig. 10)

Fig. 8

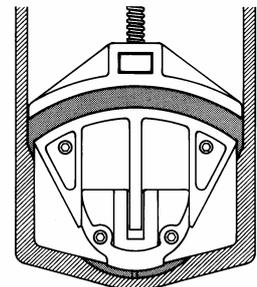


Fig. 9

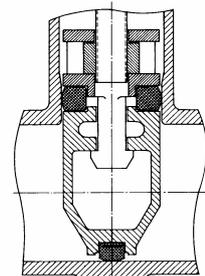


Fig. 10

