



BUTTERFLY VALVE SERIES DUPLEX

Based on their long experience in conception and development of the best solutions for water and sewage networks, Fucoli-Somepal introduces the butterfly valve series DUPLEX. The series DUPLEX is a double eccentric and bi-directional sealing valve and was designed to meet the most demanding criteria. Its effectiveness, ensures high reliability.

The butterfly valve Series Duplex has a short-pattern design (face-to-face S14 according EN 558) and is available with nominal diameters from DN 150 to DN 1200 and pressure ratings range from PN 10 to PN 25, covering a wide range of applications.

Is designed for isolation or regulation of flows, for use in water treatment plants, pumping stations, irrigation, water supply, deposits, etc.

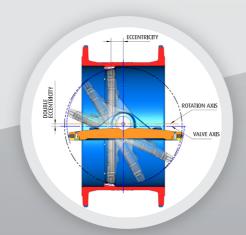
DOUBLE ECCENTRICITY

The double eccentricity design means that the obturator/shaft axis is offset from the two central axes of the valve. Thus one eccentricity consists in the main seal is offset to the shaft vertical axis. Additionally to this the shaft axis is offset above the pipeline axis.

Due to the doble eccentricity when the swivel motion is started for opening, a rotary motion occurs which is superimposed by a translatory motion in addition.

When the obturator rotates, moves away from the body seat after a few degrees of opening, the sealing ring moves away from the seat relieving the gasket and minimizing the wear abd tear, this results in a longer service life.

The translational movement enables also the replacement of the obturator sealing ring at any time, even when the valve have been closed for long periods of time.



Advantages

•Requires small installation space both in a pipeline and in a chamber where it will be installed

·Long life of the valve and low maintenance cost

·Less wear of the seal as the friction between the seal and the seat of the body disappears a few degrees after its opening;

Reduced operating torque:

·Bi-directional sealing allowing a perfect seal on both flow directions;

Easy orings and obturator sealing ring replacement in open positio

Innovative obturator system stability that prevents its displacement in the transverse direction thereby ensuring a permanent seal.



PRESSURE TESTS AT 100%

All valves are individually hydrostatically tested in the factory at high and low pressure, according to EN 1074-1/2, and EN 12266.

TEST AND CERTIFICATIONS ACCORDING TO EN 1074

All models of butterfly valves were subjected to rigorous testing according to standard EN1074. The butterfly valves developed and manufactured by Fucoli-Somepal, are certified by AENOR (Spain).







GEARBOX

Equipped as standard with gearbox correctly adjusted in the factory, in the opening and closing positions, which guarantee its correct functioning.

Gearbox with worm-gear which blocks the shutter in any position, thus impeding that the impact of the flow changes its position.



Series DUPLEX 500

In the Series Duplex 500, the sealing is performed between the EPDM sealing ring and the body seat in ductile cast iron EN - GIS-500-7 (GGG50).



Series DUPLEX 304 and DUPLEX 316L

In the Series Duplex 304 and Series Duplex 316L, the sealing is performed between the EPDM sealing ring and a body seat in stainless stell AISI 304 (DUPLEX 304 or in sainless steel AISI 316L (DUPLEX 316L).

| COMPONENTS | MATERIAL | STANDARD |
|------------------------|---|---|
| Body | Ductile Iron EN-GJS-500 | DIN EN 1563 |
| O bturator | Ductile Iron EN -GJS -500 | DIN EN 1563 |
| Body seat | Series DUPLEX 500 - Ductile Iron EN - GJS - 500 Series DUPLEX 304 - Stainless Steel 304 Series DUPLEX 316L - Stainless Steel 316L | DIN EN 1563 EN 10088-1 EN 10088-1 |
| Obturator sealing ring | EPDM elastomer with CE marking | BS EN 681-1 |
| Seal retaining ring | Ductile Iron EN -GJS -500 | DIN EN 1563 |
| Orings | EPDM elastomer with CE marking | BS EN 681-1 |
| Command shaft | Series DUPLEX 500 and DUPLEX 304 - Stainless Steel 304 Series DUPLEX 316L - Stainless Steel 316L | EN 10088-1 EN 10088-1 |
| Secondary shaft | Series DUPLEX 500 and DUPLEX 304 - Stainless Steel 304 Series DUPLEX 316L - Stainless Steel 316L | EN 10088-1 EN 10088-1 |
| Shafts cover | Bronze | DIN EN 1982 |
| Bolts | Stainless Steel A2 | EN 10088-1 |
| Washer of the shaft | Stainless Steel | AISI 303 |
| Sealings | EPDM elastomer with CE marking | BS EN 681-1 |

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