

Title (en)

BALL VALVE WITH REMOVABLE BONNET AND CARTRIDGE UNIT

Title (de)

KUGELVENTIL MIT DEMONTIERBAREM DECKEL UND KARTUSCHENEINHEIT

Title (fr)

ROBINET A BILLE AVEC ELEMENTS TETE ET SIEGE AMOVIBLES

Publication

EP 1000282 A1 20000517 (EN)

Application

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Priority

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- IB 9901069 W 19990528

Abstract (en)

[origin: FR2779203A1] A ball valve (10) includes a bonnet (18) and a removable insert assembly in which a valve ball (40) and opposed seat rings (46) are contained within a cartridge (20) of separable shells (20a, 20b). Cylindrical spring seals (48) of resilient and impervious high density graphite or silicon rubber are mounted on a reduced diameter length of each seat ring. The spring seals (48) are compressed between shoulders on the seat rings (46) and facing annular recessed surfaces in the cartridge and urge the seat rings into dynamic sealing contact with the valve ball (40). The spring seals (48) also provide static sealing at the interface of the seat rings (46) and the cartridge (20). Connecting fittings on mating surfaces of the bonnet (18) and the insert assembly enable the assembly to be completely removed from the valve body with the bonnet (18) for easy access for repair or replacement of components within the cartridge.

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