

VALVE BODY CONSTRUCTION

Two or three piece bolted construction designed for maximum rigidity against pipeline forces. Bolted construction allows easy service and on site maintenance.

BODY SEALING

A primary positive sealing action of O-rings and a secondary fire-proofgraphite gasket assure no leakage in all static body joints

PRESSURE RELIEF

(API 6D, 6.8). All standard trunnion ball valves shall be provided with self relieving seats, allowing automatic body cavity relief exceeding 1,33 times the valve pressure rating at 38°C. DRAIN SYSTEM All Dafram trunnion mounted ball valves have a drilled and threaded drain connection as per API 6D.

BLEED VALVE

All Dafram trunnion mounted ball valves will be fitted with a threaded vent anti-blow-out valve as per API 6D.

VALVE ENDS

(API 6D, 6.7). Standard end flanges shall be furnished in accordance with ASME B16.5 for sizes up to and including DN 600 (NPS 24), except MSS SP-44 for DN 550 (NPS 22) and ASME B16.47 Series A for DN 650 (NPS 26) and larger sizes. Standard welding ends shall conform to ASME B31.8 or ASME B31.8 and ASME B16.25BALL. The ball is fixed and the two spring loaded seat rings are floating, free to move along the valve axis, always in contact with the ball to provide an effective tight seal also at low differential pressures.

BALL POSITION AND POSITION INDICATORS

Proper position stops assure fully open and fully closed position of the ball. Valves fitted with manual or powered actuators shall be furnished with position stops adjusted in the factory. Wrenches or gear and actuator indicators shall indicate the ball position. Stems have proper

provisions for the verification of open and close alignment with the wrench, gear or actuator removed.

LOW FRICTION BUSHING

Side load due to line pressure acting on the ball is supported by special dry maintenance free bearings

SEATS, SEAT INSERTS & SEAT SEALINGS FLOATING SEAT RINGS

Independent floating pressure loaded seat rings give a positive tightness of the valve. The action of the springs always pushes always the upstream seat ring in contact with the ball to provide an effective tight seal especially at low differential pressures.

SELF RELIEVING DESIGN

According to API 6D definitions, the standard design for all DAFRAM trunnion mounted ball valves are bi-directional, twin-seat (with two seats, both seats uni-directional) valves. This means valves designed for blocking the fluid in both directions, with two SELF RELIEVING seats, each sealing in one direction (from the valve ends to the valve body cavity) are able to relieve the body cavity over-pressure generally downstream.

SEAT INSERTS

Nylon seat inserts are used as standard in the Dafram ball valves for general services for service temperatures of -10 to + 120°C.

STEM & STEM SEALINGS SEALINGS

Strict machining tolerances, accurate surface finish, and the primary positive sealing action of two O-rings and a secondary fire-proof graphite gasket assure zero leakage of the stem seal

STEM RETENTION

(API 6D, 6.18) All valves have been designed with an anti-blow-out stem to prevent the ejection

by internal pressure when the stem retainer has been removed. The stem design does not preclude replacement of damaged stem seals.

ANTI-STATIC DEVICE

(API 6D, 6.20) In all DAFRAM ball valves an anti-static spring loaded device assures electric continuity, with controlled low resistance, between the ball and the valve body and between the stem and the valve body.