

## JOHN FIG. 761 & 762 Air Valve

This design of air valve is for use in water systems for automatic release of accumulated air during normal operation.

Air can enter a pipeline in a number of ways, through pump glands, leaking joints and is even contained in solution in the water itself. This air accumulates at the high points of the system, and unless the flow of water is fast enough to purge the line, large pockets of air form to seriously impede the flow, a condition known as "air binding". By locating these air valves at specific points in the system, ventilation of these air pockets is achieved, increasing pumping efficiencies and flow capabilities of the pipeline.

### Operation

With the pipeline full, under pressure and no air present in the valve body, sealing is effected by the combined upthrust of the submerged ball and differential pressure times the orifice area. Accumulating air in the pipeline enters the body and depresses the water level to the point where the ball mass is sufficient to overcome the differential pressure across the orifice allowing the ball to drop, opening the orifice and expelling air. When the water level rises as air is discharged, the flotation level of the ball seals the orifice, preventing water loss.

### MATERIALS OF CONSTRUCTION

ITEM	DESCRIPTION	MATERIAL
1.	BODY	CAST IRON
2.	COVER	CAST IRON
3.	ORIFICE PLUG	D.R. BRASS
4.	BALL	RUBBER-CEDAR CORE
5.	GASKET	RUBBER INSERTION
6.	PLUG DISC	BRASS

### DIMENSIONS

SIZE	A	C	D	E	G
25	160	124	115	25	13
50	160	124	150	50	19

SIZE	Ball Dia.	Max WP kPa	Approx. Wt Kg
25	76	1400	10
50	76	1400	11



Product No. 761:  
Screwed B.S.P. Female



Product No. 762:  
Flanged to AS2129 Table 'E'

### SMALL ORIFICE

