

CAST IRON AIR VALVES AS PER IS : 14845

This covers requirement of single air valve (small or large orifice with or without integral isolating valve) and kinetic air valves with or without separate isolating sluice valve for use on water mains.

TYPE		Nominal Pressure	Nominal sizes	End Connection
Single Air Valve	1. Small Orifice Type (S1) 2. Large Orifice Type (S2)	PN 1.0 and PN 1.6	15, 25, 40 mm 25, 40, 50 mm	Flanged or Screwed
Double Air Valve	Standard type with in built isolating valve (DS1), or without isolating valves (DS2)	PN 1.0 and PN 1.6	40, 50, 80, 100 150 and 200 mm	Flanged
Kinetic Air Valve	Kinetic Air Valve (DK)	PN 1.0 and PN 1.6	40, 50, 80, 100 150 and 200 mm	Flanged

APPLICATION

Single Air Valve (Small Orifice)

For automatically releasing air which may accumulate under pressure in a section of pipe line during normal working condition.

Single Air Valve (Large Orifice)

For automatically releasing/admitting air that may accumulate under pressure in section of pipe line at the time of initial charging or draining of mains.

Double Air Valves

These valves are simply a combination of small and large air valves with common connection to the main, small orifice function being similar to that of a single air valve. Large orifice serves for automatically exhausting air when a pipe is being filled with water, or automatically ventilating a pipe when it is being emptied of water.

Kinetic Air Valves

These valves are essentially the same as the conventional double air valves but with certain refinements and are suitable for high head pipe lines where high rates of air discharge are ventilation is required.

MATERIAL

The material for different components of valves shall conform to the requirements given Table

SI Component / Body No.	Basic			Alternative		
	Material	Ref. No. IS No.	Grade or Designation	Material	Ref. No. IS No.	Grade or Designation
1. Body, cover, valve, disk, stuffing box, valve guide, cowl, gland, cap, joint support ring	Grey Cast Iron	210	FG 200	---	---	----

2. Stem	High tensile brass	320	HTB 1 or HTB 2	Stainless Steel	6603	04 Cr 17 Ni 12 Mo 2 04 Cr 18 Ni 10 12 Cr. 13
3. Low pressure seat ring and face ring	Natural rubber	11855	--	EPDM Nitrile Rubber	--	--
4. High Pressure orifice	Leaded tin bronze	318	LTB 2	High tensile Brass Stainless Steel	320 6603	HTB 2 04 Cr 18 Ni 10
5. Stem Nut	Leaded tin bronze	318	LTB 2	High tensile Brass	320	HTB 2
6. Body Seat ring	Leaded tin bronze	318	LTB 2	Stainless Steel	3444	Grade 1
7. Bolts	Carbon Steel	1363	Class 4.6	Stainless Steel	6603	-
8. Nuts	Carbon Steel	1363	Class 4	Stainless Steel	6603	-
9. Gaskets	Rubber	638	Type B	-	-	-
10. gland Packing	Jute/hemp	5414	Type III	-	-	-
11. Float (Low pressure orifice)	Timber core with vulcanite coating	-	-	-	-	-
12. Float (High pressure orifice)	Timber core with rubber coating	-	-	Stainless Steel	3444	-
13. Float Guide	Leaded tin bronze	318	LTB 2	High Tensile Brass	320	HTB 1