

INBAL VALVE SERIES 800

811-Threaded



The Inbal series 800 is a pressure operated, diaphragm actuated, in line Valve. The simplicity of construction and operation of the Inbal series 800 creates its working benefits in a wide range of services and conditions.

The Inbal Valve series 800 consists of three parts: inlet and outlet ends and a diaphragm. The diaphragm is the only moving part and serves also as the sealing mechanism. It forms a sealed chamber in the internal portion of the valve, separating operating pressure

from line pressure, and forms a drop tight seal with the seating surface of the body, when pressure is applied to the control space.

Due to its excellent hydraulic performance the Inbal Valve series 800 can serve in a very high pressure drop and wide range of flow conditions.

It is used as the basic valve in some automatic valves serving as a basic on/off valve, or remote control, pressure regulating, solenoid operated and flow control valves.

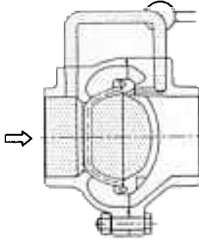
Product Features

- * Very high performance standards at a wide range of flows and line pressures.
- * No moving mechanical parts to maintain.
- * No sticking - even after prolonged periods in the open or closed positions.
- * Stable and smooth operation at a very wide range of flow rates.
- * The valve can handle significant high pressure drop without experiencing cavitation damage.
- * Driptight closure even at very low line and operating pressures.
- * Low pressure drop is assured by an excellent hydrodynamic design.
- * Line pressure alone can operate the Valve.
- * Compact and lightweight, easy to install, can be mounted in any position.
- * High flow capacities.
- * A variety of control systems are available.

Principle of Operation:

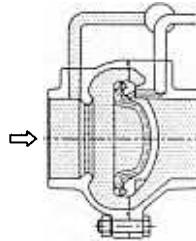
Tight closing operation

When pressure from the Valve inlet (or an equivalent independent operating pressure) is applied to the control space, the Inbal Valve closes drip tight.



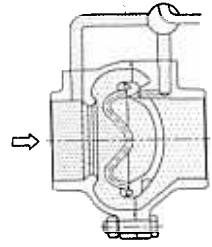
Full open operation

When pressure in the control space is allowed to exhaust to the atmosphere the Inbal Valve opens wide.



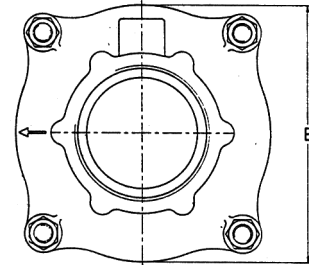
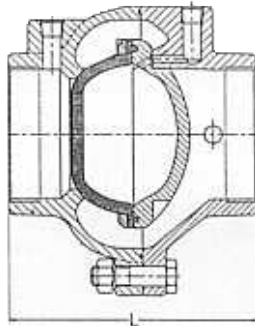
Modulating action

A stable throttling position is obtained when a quantity of pressurized fluid is held in the control space. The amount of fluid in the control space determines the position of the diaphragm.



Dimensions & Weights

Valve size mm/inch	50	2"	80	3"
L mm/inch	127	5	159	6 1/4
B mm/inch	133	5 1/4	168	6 5/8
Weight Kg/lb	4.3	9.2	8.6	19



Specifications:

Sizes:

50 thru 80 mm (2" - 3") screwed

End details:

Threading: B.S.P; N.P.T standards.

Pressure Ratings:

Grade A Diaphragm
25 Bar (360 psi) max.
1.5 Bar (20 psi) min.

Grade B Diaphragm
16 bar (230 psi) max.
1.5 bar (20 psi) min.

Grade F Diaphragm
8 bar (114 psi) max.
0.8 bar (12 psi) min.

Valve size mm/inch	50	2"	80	3"
Flow Factor: Kv / Cv	60	70	165	191
Max Normal Flow Rate: m ³ / hr / gpm	45	200	105	460

Temperature Range:

SMR5 - Water to + 65°C (150°F).
Buna-N - Water to + 90°C (194°F)
EPDM - Water to + 100°C (212°F)

Materials:

Inbal Valve:
Threated ends: Cast Iron ASTM A48-40B (DIN 1691 GG-25) Epoxy coated.
Diaphragm: SMR 5
Self cleaning strainer: Brass.
Self cleaning screen: Stainless Steel 316.

Optional Materials:

Inbal Valves:

Threated ends: Cast Stainless Steel 316L;
Carbon Steel ASTM A-216 WCB (DIN GS-45),
Epoxy coated;
Cast Bronze ASTM B62;
Cast Aluminum QQ-A-601 (A356);
Bronze Aluminum ASTM B148 (CA 955).
Diaphragm: EPDM; Buna-N.

Available Applications:

- 811-M - Manually operated Inbal Valve (N.O or N.C)
- 811-I - Remote control operated Inbal Valve
- 811-R - Pressure reducing Inbal Valve
- 811-E - Solenoid control Inbal Valve (N.O or N.C)
- 811-S - Pressure sustaining Inbal Valve
- 811-T - Rate of flow control Inbal Valve
- 811-MO - Hydrant Inbal Valve
- 811-K - Pressure relief (Quick response) Inbal Valve.
- 811-J - Pressure differential control Inbal Valve

Installation & Storage:

- * Arrow on the Valve housing must match the actual flow direction.
- * Always flush the pipelines to clean before installation of the Valve.
- * If foreign particles are suspected in the pipelines - it is recommended to install a strainer before the Inbal Valve.
- * Exhaust tube must be free of any back pressure. Provide an air gap between the exhaust tube and drain facility.
- * If the Valve is for use in ambient or fluid temperatures below freezing, consult your nearest Inbal distributor. If shut down during cold weather, the Valve control space and the control system must be drained.

MIL LTD reserves the right to make such alterations in design, dimensions, specifications and manufacture as are deemed necessary to ensure continued improvement.

REPRESENTED BY:

