

INLINE BALANCE PRESSURE FOAM PROPORTIONER

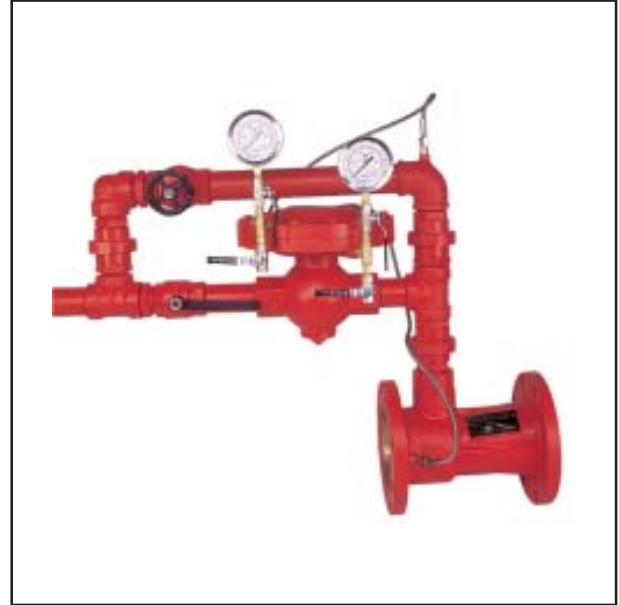


TECHNICAL DATA

MODEL	IB - Bronze construction IS 318 / ASTM B62 IBS - Stainless Steel (316) construction (ASTM A351-CF8M)	
SIZE	80, 100, 150 & 200 NB	
MAXIMUM SERVICE PRESSURE	14 Bar (200 PSI)	
MIMIMUM WORKING PRESSURE	3.0 Bar (44 PSI)	
FLOW RANGE	SIZE	FLOW
	80 NB	: 270 - 3000 LPM
	100 NB	: 650 - 5700 LPM
	150 NB	: 1200- 9500 LPM
	200 NB	: 3200-18500LPM
Flow restricted to 15000 LPM for 6% induction		
FLANGE CONNECTION	ANSI B16.24 Class 150# for Bronze ANSI B16.5 Class 150# for Stainless Steel	
THREADED OPENING	BSPT/NPT optional	
PRESSURE SENSING HOSE	TEFLON tube with Stainless Steel braided cover	
TRIM CONNECTION AND VARIOUS CONTROL VALVES	Brass / Stainless Steel	
FACTORY HYDROSTATIC TEST PRESSURE	25 Kg./ Sq.cm. (350 PSI)	
FINISH	Red - RAL 3000	
ORDERING INFORMATION	Specify a) Model Number b) Flow rate c) Percentage of foam Concentrate used d) Type of Foam Concentrate used e) Flange Connection specification	

APPLICATION

The inline balance pressure foam proportioners are used with positive displacement foam concentrate supply pump. The system controls accurately the flow of foam concentrate into the water stream over a wide range of flow rate and pressure.



The Inline Balance Pressure Foam Proportioning System is used for simultaneous operation of the multiple foam injection even with different pressures between the two injection point with a single concentrate supply line. Various sizes of inline balance pressure proportioner can be combined to suit the flow requirement of each hazard area.

SPECIFICATION

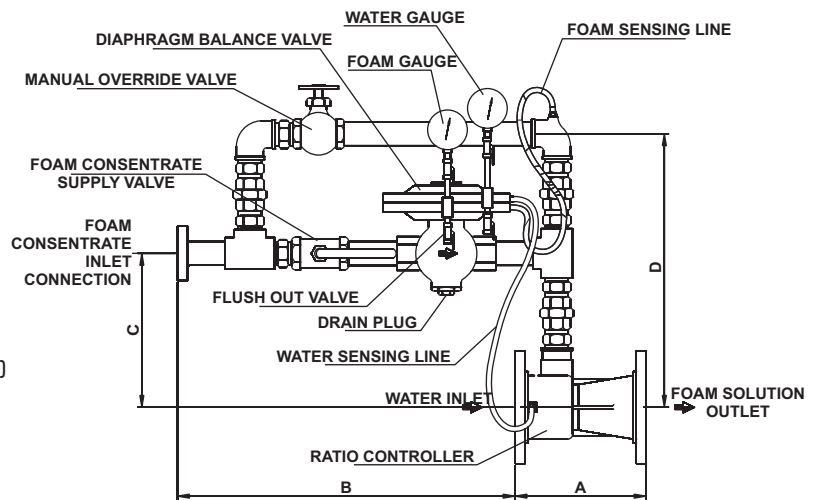
Inline balance pressure proportioning system utilizes a single, positive displacement foam concentrate supply pump, an atmospheric foam concentrate storage tank, inline balance proportioner, and a foam concentrate regulating valve. The pressure regulating valve is mounted on foam concentrate return line to the foam concentrate storage tank. The valve regulates the foam concentrate supply pressure. The Inline balance pressure proportioner consists of a ratio controller, diaphragm operated pressure balancing valve, water and foam gauges, and pressure sensing hose of teflon tube with stainless steel braided cover, interconnecting trim fittings with various control and flush valves. The water inlet pressure and foam concentrate pressure at metering orifice is sensed by a diaphragm valve and it automatically balances the concentrate supply to provide accurately proportioned water foam solution over a wide range of flow conditions. A foam concentrate supply valve is also provided as an optional item. The system requires foam concentrate supply pressure of 1.5-2.0 bar: higher than the water supply pressure. The Inline balance pressure proportioner is also provided with a manual balancing valve.

INSPECTION AND MAINTENANCE

A qualified and trained person must commission the system. After a few initial successful tests, an authorized person must be trained to perform the inspection and testing of the system. It is recommended to carry out physical inspection of the system at least once in a week. The inspection should verify that all the valves are in their proper position as per the system requirement and no

damage has taken place to any component. The system where foam concentrate piping is maintained in charged condition, the provision should be made to flow foam through each Inline Balance Proportioner at least once in six weeks. The system should be fully tested at least once in a year or in accordance with applicable NFPA codes, or in accordance to the guidelines of the organization having local jurisdiction.

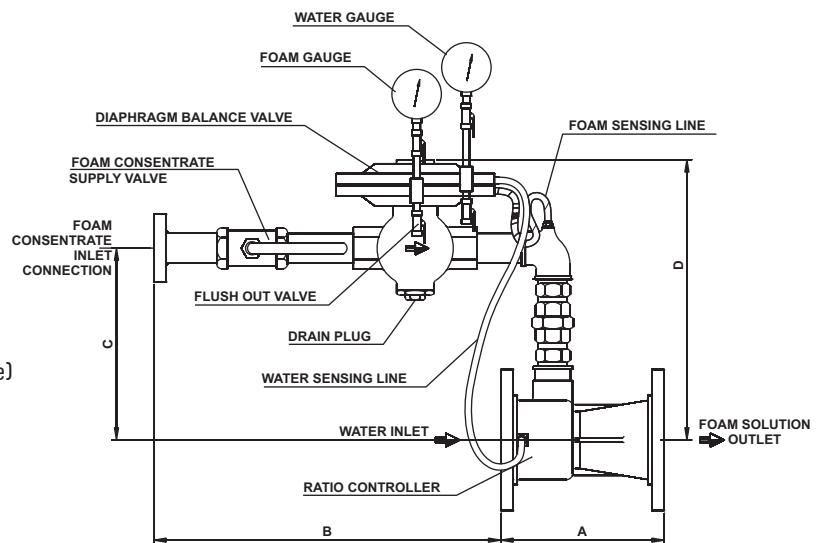
INLINE BALANCE PRESSURE PROPORTIONER WITH MANUAL OVERRIDE



DIMENSIONS in mm (Approximate)

SIZE	A	B	C	D
80 NB	191	630	267	490
100 NB	264	608	278	514
150 NB	330	700	352	605
200 NB	340	718	362	625

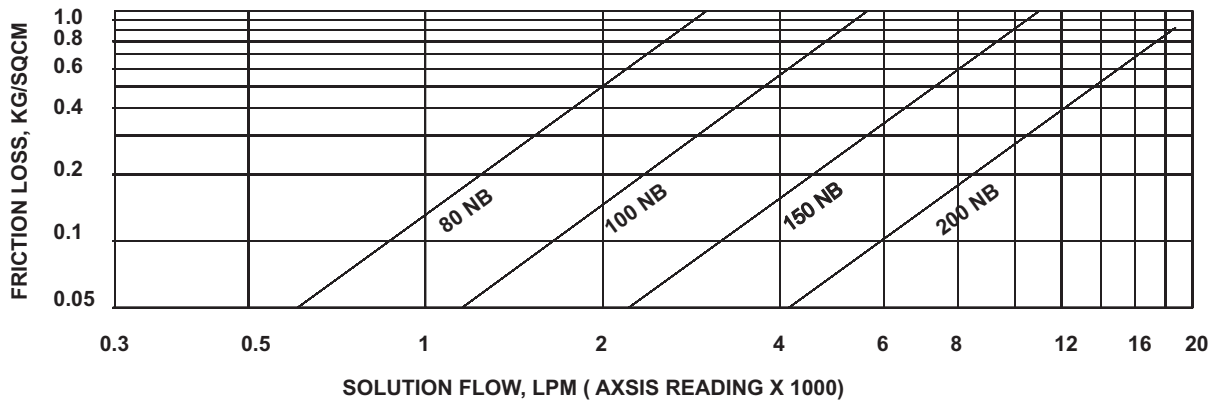
INLINE BALANCE PRESSURE PROPORTIONER WITHOUT MANUAL OVERRIDE



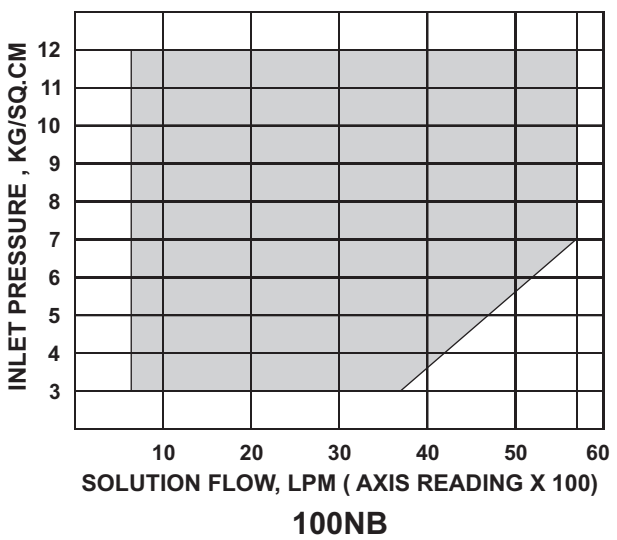
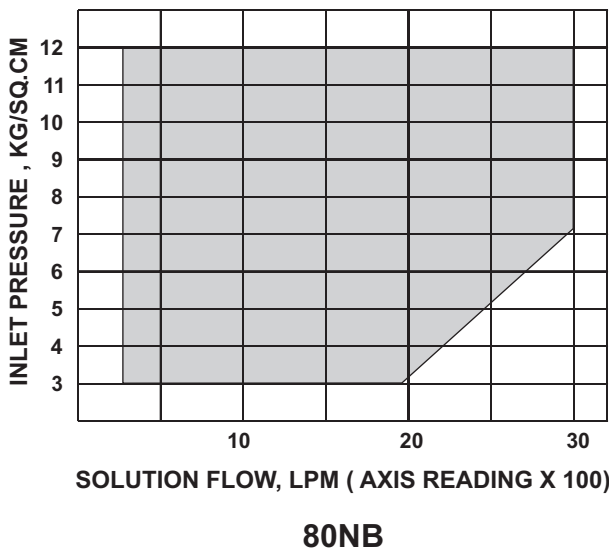
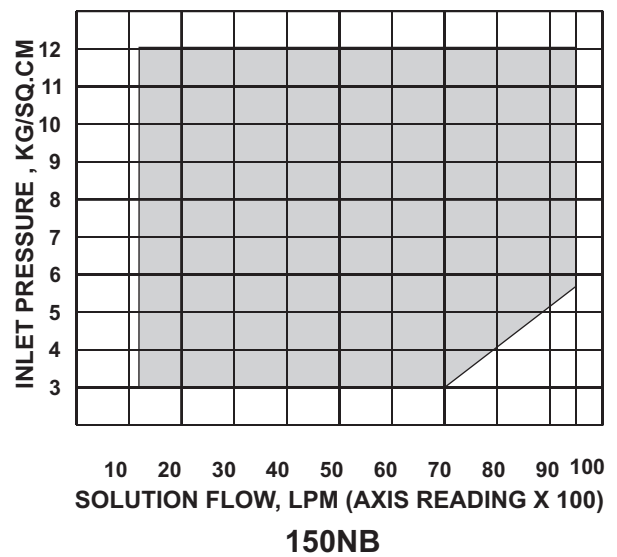
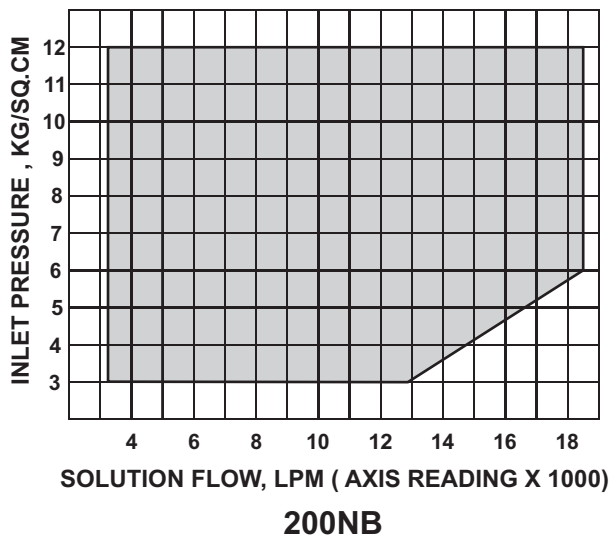
DIMENSIONS in mm (Approximate)

SIZE	A	B	C	D
80 NB	191	545	285	427
100 NB	264	540	305	445
150 NB	330	590	360	540
200 NB	340	586	396	581

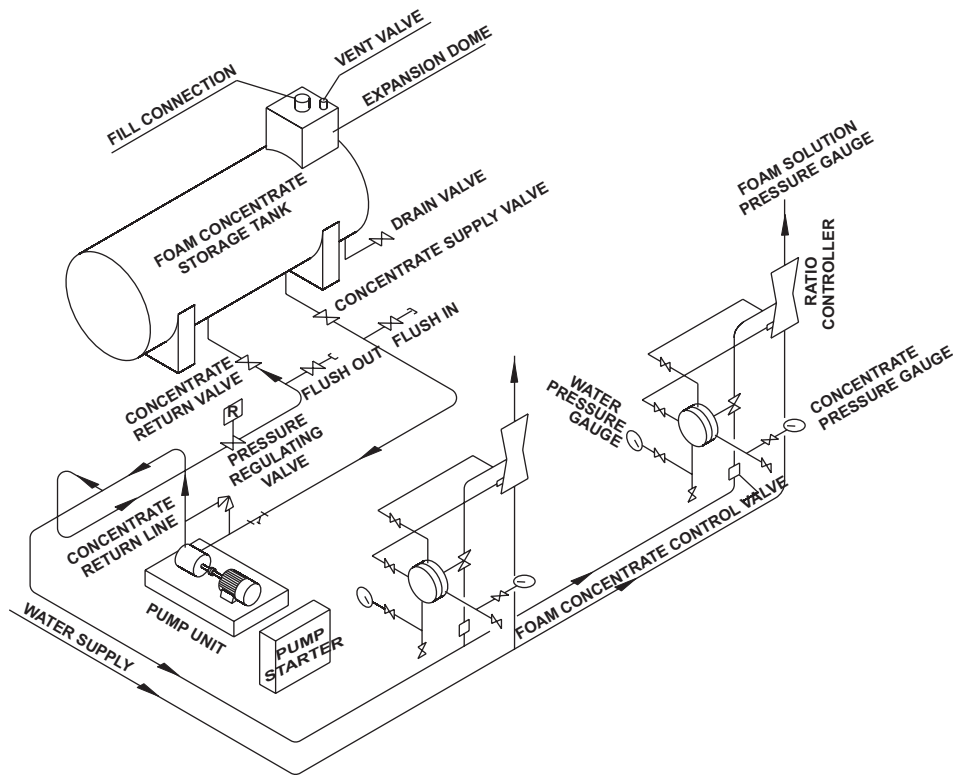
FLOW VS PRESSURE LOSS



FLOW VS PRESSURE LOSS



TYPICAL INLINE BALANCE PRESSURE FOAM PROPORTIONING SYSTEM



CAUTION

Do not turn off the system or any valve to repair or test the system, without placing a roving Fire Patrol in the area covered by the system. The Patrol should

continue until the system is put back in service. Also inform the local security guards and the control alarm station, so as to avoid false alarm..

LIMITED WARRANTY

HD FIRE PROTECT PVT. LTD. hereby referred to as HD FIRE warrants to the original purchaser of the fire protection products manufactured by HD FIRE and to any other person to whom such equipment is transferred, that such products will be free from defect in material and workmanship under normal use and care, for two (2) years from the date of shipment by HD FIRE. Products or Components supplied or used by HD FIRE, but manufactured by others, are warranted only to the extent of the manufacturer's warranty. No warranty is given for product or components which have been subject to misuse, improper installation, corrosion, unauthorized repair, alteration or un-maintained. HD FIRE shall not be responsible for system design errors or improper installation or inaccurate or incomplete information supplied by buyer or buyer's representatives.

HD FIRE will repair or replace defective material free of charge, which is returned to our factory, transportation charge prepaid, provided after our inspection the material is found to have been defective at the time of initial shipment from our works. HD FIRE shall not be liable for any incidental or consequential loss, damage or expense arising directly or indirectly from the use of the product including damages for injury to person, damages to property and penalties resulting from any products and components manufactured by HD FIRE. HD FIRE shall not be liable for any damages or labour charges or expense in making repair or adjustment to the product. HD FIRE shall not be liable for any damages or charges sustained in the adaptation or use of its engineering data & services. In no event shall HD Fire's product liability exceed an amount equal to the sale price.

The foregoing warranty is exclusive and in lieu of all other warranties and representation whether expressed, implied, oral or written, including but not limited to, any implied warranties or merchantability or fitness for a particular purpose. All such other warranties and representations are hereby cancelled.

NOTICE :

The equipment presented in this bulletin is to be installed in accordance with the latest publication standards of NFPA or other similar organisations and also with the provision of government codes or ordinances wherever applicable.

The information provided by us are to the best of our knowledge and belief, and are general guidelines only. Site handling and installation control is beyond our reach. Hence we give no guarantee for result and take no liability for damages, loss or penalties whatsoever, resulting from our suggestion, information, recommendation or damages due to our product.

Product development is a continuous programme of HD FIRE PROTECT PVT. LTD. and hence the right to modify any specification without prior notice is reserved with the company.