



**PRODUCT MANUAL FOR
PLASTIC EQUILIBRIUM FLOAT VALVES
FOR COLD WATER SERVICES
ACCORDING TO IS 12234:1988**

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification licence/certificate.

1.	Product	:	IS 12234:1988
	Title	:	PLASTIC EQUILIBRIUM FLOAT VALVES FOR COLD WATER SERVICES
	No. of Amendments	:	NIL
2.	Sampling Guidelines:		
a)	Raw material	:	As per clause 4 of IS 12234 : 1988
b)	Grouping guidelines	:	Each type of float valve shall be tested for all requirements to cover that variety in the scope of the licence.
c)	Sample Size	:	Float Valves – 2 Nos
3.	List of Test Equipment	:	Please refer ANNEX – A
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – B
5.	Possible tests in a day	:	(i) Construction (Clause 6) (ii) Hydraulic and Shut-Off Test (Clause 7.1) (iii) Flow Test (Clause 7.3)
6.	Scope of the Licence :		
	“Licence is granted to use Standard Mark as per IS 12234 : 1988 with the following scope:		
	Name of the product	PLASTIC EQUILIBRIUM FLOAT VALVES FOR COLD WATER SERVICES	
	Type	Horizontal inlet shank type /Vertical inlet shank type	
	Pressure reducing attachment (If provided)	High pressure reducer (HP) / Low pressure reducer (LP)	

ANNEX A**LIST OF TEST EQUIPMENT***Major test equipment required to test as per the Indian Standard*

Sl. No.	Tests used in with Clause Reference	Test Equipment
1	Construction (Clause 6)	<ul style="list-style-type: none"> - Vernier Calliper - Ring thread gauges - Plug thread gauges
2	Hydraulic and Shut-Off test (Clause 7.1)	<ul style="list-style-type: none"> - Hydraulic pressure test setup comprising pressure gauge and pressure pump etc - Stopwatch
3	Antisiphonage test (Clause 7.2)	<ul style="list-style-type: none"> - Test setup as per Appendix - A of IS 12234 : 1988 consist of Pressure gauges, Vacuum pump or Injector, metal cylinder etc - Stop watch
4	Flow test (Clause 7.3)	<ul style="list-style-type: none"> - Test setup as per Appendix - B of IS 12234 :1988 - Cistern conforming to IS 7231 - Stopwatch - Measuring Jar - Steel scale/Steel tape
5	Endurance test (Clause 7.4)	<ul style="list-style-type: none"> - Test setup as per Appendix - C of IS 12234 : 1988 operating the float arm as to fully open and fully close the valve on automatic cycle. - Water supply arrangement to supply water with head 1.5 ± 0.1 m - Stopwatch - Steel scale/Steel tape

The above list is indicative only and may not be treated as exhaustive.

ANNEX B

SCHEME OF INSPECTION AND TESTING

1. LABORATORY - A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.

1.1 The manufacturer shall prepare a calibration plan for the test equipments.

2. TEST RECORDS – The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. LABELLING AND MARKING – As per the requirements of IS 12234 : 1988

4. CONTROL UNIT –Float valves of same type manufactured from same material under similar conditions of manufacturing in a day shall constitute a control unit.

5. LEVELS OF CONTROL - The tests as indicated in column 1 of Table 1 and the levels of control in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.

5.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.

6. REJECTIONS – Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1

(1)				(2)	(3)		
Test Details				Test equipment requirement R: Required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Methods			No. of Sample	Frequency	Remarks
		Clause	Reference				
4	Materials	4	IS 12234	-	-	Each consignment	Conformity shall be ensured.
5	Manufacture and Workmanship	5.1	IS 12234	R	Each valve	-	-
		5.2	IS 12234	-	-	Each consignment	Conformity shall be ensured.
6	Construction	6.1 to 6.3, 6.6 to 6.9	IS 12234	R	Each valve	-	-
	Dimensions, Screw threads and Back nut	6.4, 6.5 and 6.10	IS 12234	R	One	Each hour production for each type of valve	
7.1	Hydraulic and Shut-Off Test	7.1.1, 7.1.2	IS 12234	R	One	Each Control Unit	-
7.2	Antisiphonage Test	Appendix-A	IS 12234	S	One	Once in a month	-
7.3	Flow Test	Appendix-B	IS 12234	R	One	Each Control Unit	-
7.4	Endurance Test	Appendix-C	IS 12234	S	One	Once in six months	-

Note-1: Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

Note-2: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification for approval by BO Head.