



उत्पाद मैनुअल
गुरुत्व प्रकार की प्रावधान टंकियों के लिए बीटा (उत्प्रवाह) वाल्व के लिए
आई एस 17585 : 2021 के अनुसार

PRODUCT MANUAL
BETA (OUTFLOW) VALVES FOR GRAVITY TYPE FLUSHING CISTERNS
ACCORDING TO IS 17585 : 2021

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो) अनुरूपता मूल्यांकन (विनियम, 2018 की योजना -I के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure uniformity 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.

1.	मानक संख्या IS No.	:	IS 17585 : 2021
	शीर्षक Title	:	Beta (Outflow) Valves for Gravity Type Flushing Cisterns
	संशोधनों की संख्या No. of amendments	:	Nil
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	Manufacturer shall declare the materials as given in Table 1 of IS 17585:2021, used for manufacturing beta valves. HDPE material shall confirm to IS 7328 and polystyrene, high impact material shall confirm to IS 2267. Whenever the relevant Indian Standard for any material is not specified, these shall be agreed to between the manufacturer and the purchaser. Note: This section indicates the requirements for raw material (if specified in the IS) for which compliance is to be established during Grant of Licence/Change in Scope of Licence/ Factory Surveillance
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Please refer to Annex-A

c)	नमूने का परिमाण Sample Quantity	:	2 pieces Note: This section indicates the quantity of the sample of the product and/or the raw material (if applicable), required to be sent to the laboratory for testing, for the purpose of Grant of Licence/Change in Scope of Licence/ Factory Surveillance (incase of market surveillance, effort may be made to procure therequired quantity of product sample, as far as possible since raw material sample may not be available in market)
d)	परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर Parameters to be Declared in Test Request	:	- Same as the scope of licence - Whether the beta valve is meant to be used for water efficient flushing cisterns
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	Please refer to Annex-B
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	:	Please refer to Annex-C
5.	एक दिन में संभावित परीक्षण Possible tests in a day		
	(i) General requirements (Cl 4) (ii) Flushing flow rate (Cl 5.1) (iii) Leakage Test (Cl 5.2) Note: This section is for the guidance of BIS Certification Officers/Technical Auditors of BIS Authorized Outside Surveillance Agencies (OSAs) during factory inspection to provide readyreference regarding the tests which can be witnessed during the inspection in the factory by the officer/auditor.		
6.	लाइसेंस का दायरा /Scope of the Licence:		
	“Licence is granted to use Standard Mark as per IS 17585 : 2021 with the following scope:		
	Name of the product	Beta (Outflow) Valves for Gravity Type Flushing Cisterns	
	Outlet Diameter (in mm)	47.5 / 59 / 62 / 65	
	Height (in mm)	upto and including __ mm	
	Material of Beta (Outflow) Valves	High Density Polyethylene (HDPE) / Polystyrene, High Impact / Polypropylene / Acrylonitrile-butadiene-styrene (ABS) / Polyoxymethylene (POM)	

ANNEX A

Grouping Guidelines

1. Beta (Outflow) Valves for Gravity Type Flushing Cisterns as per IS 17585 : 2021 is classified as below:

(a) Outlet Diameter (in mm) - 47.5 / 59 / 62 / 65

(b) Height (in mm) – Height of beta valves varies according to the size of cistern and shall be agreed between manufacturer and customer (that is, cistern manufacturer). The recommended heights of beta valve are 150, 175, 190, 265 or 280 mm.

The manufacturer shall declare the maximum height of beta valves that they intend to cover in the scope of licence.

(c) Material of Beta (Outflow) Valves : High Density Polyethylene (HDPE) / Polystyrene, High Impact / Polypropylene / Acrylonitrile-butadiene-styrene (ABS) / Polyoxymethylene (POM)

Firm shall declare the Materials as given in Table 1 of IS 17585:2021, used for manufacturing Beta (Outflow) Valves.

2. Considering the above, the following grouping guidelines for GoL/ CSoL shall be followed:

a) Each Outlet Diameter of beta valves is to be tested to include that particular Outlet Diameter in the scope of licence.

b) One sample of the maximum Height for a particular Outlet Diameter of beta valve shall be tested to cover all Heights up to and including the Height tested, for that particular Outlet Diameter of beta valve.

c) Each Material of beta valves is to be tested to include that particular Material in the scope of licence.

3. The Firm shall declare the varieties (outlet diameter and height) of beta (outflow) valves they intend to cover in the Licence. The Scope of Licence may be restricted based on the Manufacturing and Testing capabilities of the Manufacturer.

4. During the operation of the Licence, BO shall ensure that all the varieties covered in the Licence are tested in rotation, to the extent possible.

ANNEX B**List of Test Equipment***(INDICATIVE LIST, FOR GUIDANCE ONLY)*

S. No.	Tests used in with Clause Reference	Test Equipment
1.	General requirements Clause 4	- Measuring Scale/Tape - Vernier Caliper
2.	Flushing Flow Rate, Clause 5.1	- Flushing Cistern and Inlet valve as per IS 12234 for connection with Beta Valve - Pressure Gauge - Measuring Cylinder - Stopwatch
3.	Leakage Test, Clause 5.2	- Flushing Cistern and connections with Beta Valve
4.	Endurance Test, Clause 5.3	- Endurance Test set up with cycle counter as per fig 2 and Cl. 5.3.1 - Pressure Gauge

ANNEX C

SCHEME OF INSPECTION AND TESTING

1. QUALITY ASSURANCE PLAN

1.1 It is expected that during operation of BIS licence, manufacturers will implement a Quality Assurance Plan (QAP) i.e. a plan of regular testing and in-process controls, designed to ensure that the product bearing the Standard Mark conforms to all requirements of the Indian Standard.

1.2 The manufacturers shall define a Quality Assurance Plan (QAP) defining the control unit (i.e. lot/batch etc.), the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and declare the arrangement for testing i.e. whether in-house or subcontracting/sharing for each applicable test and submit the same to BIS Branch Office for information. The manufacturer shall comply with the QAP and maintain test records in accordance with para 2.1.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is : All the beta valves of similar outlet diameter and height manufactured in a day shall constitute a control unit.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in **Table 1**. Manufacturer has the discretion of declaring their own levels of control or accept the levels of control given in this document.

1.3.3 The manufacturer shall ensure inspection and testing as per the Quality Assurance Plan submitted by them on the whole production of the factory which is covered by this plan.

2. ENSURING COMPLIANCE THROUGH TESTING- manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard for which they may have in-house test facilities. However, there is no obligation to maintain in-house laboratory. Licensee may use alternative arrangements for tests of the production as per the declared QAP. Various alternatives are available for operation of BIS certification as given below and the relevant guidelines for availing such relaxations by the manufacturers, as amended from time to time, are to be referred :

- i) Shared testing resources like common facility,
- ii) Cluster based testing facility,
- iii) Sub-contracting to outside laboratories which may either be:
 - a) BIS recognised/empanelled laboratories, or
 - b) Any accredited laboratory as per ISO/IEC 17025

2.1 TEST RECORDS- The manufacturers shall maintain test records for the tests carried out

(either in-house or at a sub-contracted or at shared test facility) to establish conformity of the product to the Standard for operation of licence. For the tests being subcontracted or conducted at a shared test facility, test results issued by the laboratories or test facilities, shall be made available for inspection by BIS.

3. PACKING AND MARKING - The Standard Mark as given in the Schedule of the licence shall be incorporated legibly and indelibly on each beta (outflow) valve provided always that the material so marked conforms to each requirement of the specification.

3.1 Marking shall be done as per Clause No 7 of IS 17585:2021.

3.2 **Additional Marking requirements:** Additionally, the following shall also be marked on product or package :

- a) “For BIS certification details please visit www.bis.gov.in”
- b) Height of the valve
- c) Material of valve

4. REJECTION - The production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark. 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*(Recommended Levels of Control by BIS- for Guidance Only)*

(1)				(2)		
Test Details				Recommended Levels of Control		
Clause	Requirement	Test Methods		No. of Sample	Frequency	Remarks
		Clause	Reference			
4.1.2	Material	4.1.2	IS 17585	One	Each consignment	No further testing is required, if material received with test certificate or ISI Marked.
4	General requirements – i) Construction ii) Compatibility with water closet components iii) Functional operation	4.1.1 4.2 4.3	IS 17585	Firm to have adequate in-process controls to check compliance of this parameter as per the tolerances given in the Indian Standard. However, appropriate records shall be maintained by the manufacturer for evidence of conformity.		
5	PERFORMANCE REQUIREMENTS -					
5.1	Flushing Flow Rate	5.1	IS 17585	One	Each Control Unit	-
5.2	Leakage Test	5.2	IS 17585	One	Each Control Unit	-
5.3	Endurance Test	5.3	IS 17585	One	Once in a year	Each outlet diameter of beta (outflow) valve produced during the period shall be tested in rotation. *

* This is a type test and shall be conducted whenever there are changes in the design, construction, materials or manufacturing process. Even if no change is envisaged, this test shall be done once in a year.