



उत्पाद मैनुअल

भा. मा. 10805: 2022 के अनुसार

**कृषि पम्पिंग पद्धतियों कि चूषण लाइनों में उपयोग किये जाने के लिए फुट वाल्व , पश्चवाहन
वाल्व या नान रिटर्न वाल्व और बोर वाल्व के लिए
दस्तावेज संख्या-पी एम/आई एस 10805/2/जनवरी 2023**

*भारतीय मानक ब्यूरो की स्कीम-I (अनुरूपता मूल्यांकन) विनियम, 2018 के तहत यह उत्पाद मैनुअल
प्रमाणीकरण के प्रचालन में रीति और पारिशिष्ट की सुसंगतता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा
कार्यालयों और लाइसेंसि द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस प्रमाणीकरण लाइसेंस/*

**PRODUCT MANUAL FOR
FOOT-VALVES, REFLUX VALVES OR NON-RETURN VALVES AND
BORE VALVES TO BE USED IN SUCTION LINES OF AGRICULTURAL
PUMPING SYSTEM
ACCORDING to IS 10805:2022**

Document No.-PM/IS 10805/2/ January 2023

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.

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1.	Product	:	IS 10805: 2022
	Title	:	Foot-Valves, Reflux Valves or Non-return Valves and Bore Valves to be used in Suction Lines of Agricultural Pumping Systems
	No. of Amendments	:	Nil
2.	Sampling Guidelines:		
a)	Raw material	:	- Black Japan paint as per IS 341 - Paint as per IS 158 Material of components- Declaration of material of various components used shall be submitted along with the specifications to which they conform. Conformity to the declared specifications shall be checked vis-à-vis declared specifications. For materials which are under mandatory BIS certification, manufacturer shall ensure that only ISI Marked material is used and is received with test certificate.
b)	Grouping guidelines	:	Please refer ANNEX – A
c)	Sample Size	:	1 Valve
3.	List of Test Equipment	:	Please refer ANNEX – B
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – C
5.	Possible tests in a day	:	All Tests
6.	Scope of the Licence	:	Please refer ANNEX – D

ANNEX-A**GROUPING GUIDELINES**

1. IS 10805: 2022 covers different types of valves to be used in suction lines of centrifugal pumps for agricultural purposes.
2. The following parameters are taken into consideration while evolving the grouping guidelines:
 - a) Type of valve: Foot-valves, Reflux valves or Non-return valves and Bore valves
 - b) End Connections: Screwed, Flanged
 - c) Nominal Size (mm): 25, 32, 40, 50, 65, 80, 100, 125, 150

3. Considering various sizes, Valves are classified in following groups:

Group	Nominal sizes, in mm
Group I	25, 32, 40, 50
Group II	65,80, 100
Group III	125, 150

4. Considering the above, the following grouping guidelines shall be followed for GoL/CSoL:
 - a) One sample of highest nominal size from each group of sizes, for each type of valve and end connection, shall be tested to cover all sizes in the particular group for the type and end connection tested.
 - b) In addition to the nominal sizes drawn for independent testing as per above guidelines, factory test report of all other nominal sizes intended to be covered in scope shall also be submitted.
5. The Firm shall declare the varieties of various 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.
6. During the operation of license, it shall be ensured that all varieties covered in the license are tested in rotation, to the extent possible.

ANNEX-B**List of Test Equipment***Major test equipment required to test as per the Indian Standard*

Sr No	Tests used in with clause reference	Test equipment
1	Dimensions (<i>Clause 3, 5.2 and 5.3</i>)	(a) Vernier calipers (b) Micrometer (c) Snap Gauges (d) Thread Gauges
2	K- Value and Discharge rang (<i>Clause 5.1 and 7.2</i>)	(a) Flowmeter or V -notch (b) Stop watch (c) Manometer
3	Seat Test (<i>Clause 7.1.1</i>)	(a) 2 m long pipe (b) Stop watch
4	Housing Test (<i>Clause 7.1.2</i>)	(a)Hydraulic Testing Machine

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

ANNEX C**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 equipment.

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

3. LABELLING AND MARKING – As per Clause 9 of IS 10805: 1986.

4. CONTROL UNIT – All the valves of the same type, end connections and size manufactured under identical condition of production 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.

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
LEVELS OF CONTROL

Test Details				Test equipment requirement Required (R) or Sub-contracting permitted (S)	Levels of Control		
Clause	Requirement	Test Methods			No. of Sample	Frequency	Remarks
		Clause	Reference				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
4	Materials	4	IS 10805	S	One	Each Consignment	Material of components- Record of material of various components used along with the specifications to which they conform, shall be retained. Conformity to the declared specifications shall be checked vis-à-vis declared specifications. For materials which are under mandatory BIS certification, manufacturer shall ensure that only ISI Marked material is used and is received with test certificate For other materials, No testing is required if the material is ISI Marked or accompanied with a test certificate.
6	Coatings	6	IS 805 IS 341 IS 158	S			
3	Dimensions	3 Table 1	IS 10805	R	Manufacturer shall exercise adequate levels of control to ensure that entire production should conform to the Standard. Appropriate records of testing shall be maintained.		
5.2	Screwed ends	5.2	IS 10805 IS 554	R			
5.3	Flange Dimensions	5.3	IS 10805 Table 3	R			
7	TESTINGS						
7.1.1	Seat Test	7.1.1	IS 10805	R	Each valve		

7.1.2	Housing Test	7.1.2	IS 10805	R	Each valve		
7.2	K- Value Test	7.2, 5.1	IS 10805	R	One	Once in a fortnight from each size and type	

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.

ANNEX-D

SCOPE OF LICENCE

Licence is granted to use Standard Mark as per IS 10805: 2022 with the following scope:	
Type	Foot-Valves/ Reflux Valves or Non-return Valves/ Bore Valves
End Connections	Screwed, Flanged
Nominal Size (mm)	25, 32, 40, 50, 65, 80, 100, 125, 150