



उत्पाद मैनुअल
आई एस 16723: 2020 के अनुसार
संयोजन ताले के लिए

दस्तावेज़ संख्या - पी एम/आई एस 16723/2/ जून 2021

भारतीय मानक ब्यूरो की स्कीम-1 (अनुरूपता मूल्यांकन) विनियम, 2018 के तहत यह उत्पाद मैनुअल प्रमाणीकरण के प्रचालन में रीति और पारिश्रिता की सुसंगतता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों और लाइसेंसी द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस प्रमाणीकरण लाइसेंस/ प्रमाणपत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज़ का उपयोग किया जा सकता है।

**PRODUCT MANUAL FOR
COMBINATION LOCKS
ACCORDING to IS 16723:2020**

Document No.- PM/IS 16723/2/June 2021

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 16723: 2020
	Title	:	Combination Locks
	No. of Amendments	:	One
2.	Sampling Guidelines:		
a)	Raw material	:	-
b)	Grouping guidelines	:	Sample of each Class of Combination Locks shall be tested separately for GoL/CSoL to cover that particular Class of Lock in the Scope of Licence
c)	Sample Size	:	10 Nos
3.	List of Test Equipment	:	Please refer ANNEX – <u>A</u>
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – <u>B</u>
5.	Possible tests in a day	:	Licence is granted and operated on factory testing basis. Total 7 mandays are required for complete testing. During operation of the licence, only Construction test (Cl. 6) shall be done twice a year. Other tests are to be done once in 7 years in factory.
6.	Scope of the Licence:		
	Licence is granted to use Standard Mark as per IS 16723 :2020 with the following scope:		
	Name of Product	Combination Locks	
	Class	Class I/Class II/Class III	

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 as per Clause 6	Vernier Caliper
2.	Manipulation Test as per Clause 9.3	a. Listening devices/visual aids/ portable computers/ or other similar equipment. b. Stop Watch
3.	Punching Attack Test as per Clause 9.4	Punch and a Hammer
4.	Endurance Test as per Clause 9.5	a. Cycling Machine that can turn in both directions for 10000 cycles
5.	Salt Spray Corrosion Test as per Clause 9.6	a. Test solution b. pH paper/pH meter c. Salt spray Chamber
6.	Aging Stress Distortion as per Clause 10.2	a. Circulating Air Oven capable of providing 200 fresh air charges per hour b. Stop Watch
7.	Moisture absorption as per Clause 10.3	a. An insulated specimen chamber having a temperature-controlled water reservoir with a pump b. A spray chamber for humidifying the air c. An air circulating fan d. Provision for heating the air e. Specimen supports f. The necessary means of control. The dry bulb temperature of the chamber is to be maintained at 60 ± 1 °C (140 ± 2 °F) for the duration of the exposure. The relative humidity is to be maintained at 98 ± 2 percent throughout the test
8.	Vibration Test as per Clause 11	a. Vibration Test machine b. Dial gauge c. Stop Watch

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 equipment.

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

3. LABELLING AND MARKING – As per the requirement of IS 16723.

4. CONTROL UNIT - Combination Locks of same Class manufactured in a week 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 Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
6	Construction	6	IS 16723	R	1	Each Control Unit	--
9.2	Operation Test	9.2	IS 16723	R	1	Once in 7 years	These tests are type tests and shall be carried out for initial approval of design or when any subsequent change in the design of the lock is made. These tests shall be carried out once in 7 years in such a manner that each class of lock, for which the manufacturer has obtained licence, is tested at least once in 7 years.
9.3	Manipulation Test	9.3	IS 16723	R	3		
9.4	Punching Attack Test	9.4	IS 16723	R	1		
9.5	Endurance Test	9.5	IS 16723	S	3		
9.6	Salt Spray Corrosion Test	9.6	IS 16723 IS 9844	S	1		
10.2	Aging Stress Distortion	10.2	IS 16723	S	2		
10.3	Moisture Absorption	10.3	IS 16723	S	2		
11	Vibration Test	11	IS 16723	S	1		

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 mandatory 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.