

# R400 Multifunctional Rain Test Chamber for IPX1 IPX2 IPX3 IPX4 IPX5 IPX6

# **Basic Information**

Place of Origin: Guangdong , China

Brand Name: YueXin

• Certification: ISO 20653:2013, DIN 40050-9:1993,

IEC60529:2013 VW 80000:2017 LV124 K-10

Model Number: YX-IPX16GS-R400

Minimum Order Quantity: 1 pcs

Price: usd+20000-50000+pcsPackaging Details: wooden box package

Delivery Time: 30-45 days

• Payment Terms: T/T

• Supply Ability: 100+pcs+30



# **Product Specification**

• Rotating Speed: 1-5 Rounds Per Minute

• Test Function: IPX1 IPX2 IPX3 IPX4 IPX5 IPX6

Window Material: Tempered Glass

Controller: 7-inch Touch Screen + PLC
Turntable Tilt: 0°or 15°(horizontal Direction)

• Working Environment: Drip , Rain, Splash Water, Water Spray,

Powerful Water Spray

• Turn Table Load Bearing: 40KG

Name: IPX1-6 Waterproof Testing Equipment

Highlight: Multifunctional Rain Test Chamber,

**IPX4 Rain Test Chamber** 



# **Product Description**

#### R400 Multifunctional Rain Test Chamber for IPX1 IPX2 IPX3 IPX4 IPX5 IPX6

#### Generl specifications:

Dimension	Outer :L1350*W1100*H1900/ L2400*W400*H1500; Inner : W 900×D 900×H 1050 (mm)	
Material	External : steel plate; Internal : 304 stainless steel	
Power supply	380V/50HZ	
Power	2.5kW	

## **Product description:**

The IPX1-6 chamber is an all-inclusive waterproof testing facility that encompasses the test parameters essential for six waterproof grades. It can handle diverse testing demands, from minimal dripping rain to soaking rain and powerful water spray scenarios, thereby proving extremely beneficial.

A protective cover is installed at the bottom of the drip tank to prevent the head from being hurt by the nozzle during operation. The equipment uses a high-quality servo motor to drive the swing tube, so that the swing angle is more precise and the noise is low.

The flow rate is manually adjusted with a glass flow mete<sup>5</sup>.

Use a pressure gauge to display the test water pressure.

The sample power socket (220V, 10A) is mounted on the right wall of the inner box, which is convenient for the user to do the live test of the sample; and after the sample is powered on, the turntable rotation will be automatically adjusted to forward and reverse rotation to prevent winding  $^6$ .

Controller: 7-inch touch screen + PLC, using Yuexin self-developed software, which can be switched to multiple languages. Test time setting: 0-999min<sup>8</sup>.

Universal casters are mounted on the bottom, which has good load-bearing and easy to move and fix the equipment.

#### Working scene:

The IPX1-6 waterproofing standards find extensive application in multiple fields like electronics, construction, automotive, and various other industries, where products undergo rigorous waterproof testing. Meeting the criteria set by the IPX1-6 ratings through these tests ensures that the products maintain optimal functionality even when exposed to water, thus enhancing their overall reliability.

# Standard parameters for IPX1/2:

Item	Parameter		
Drip area	600×600mm		
Distance between nozzles	20mm		
Diameter of nozzles	0.4mm		
Water flow(IPX1) <sup>9</sup>	0.36-0.54 L/min		
Water flow(IPX2)	1.08-1.26L/min		
Drip distance <sup>10</sup>	200mm		

## Standard parameters for IPX3/4:

Item	Parameter		
Radius of swivel tube 11	R400		
Diameter of swivel tube	800mm		
Internal diameter of swivel tube	15mm		
Internal diameter of nozzle	0.4mm		
Number of nozzles of swivel tube	See remark <sup>12</sup>		
Distance between nozzles	50mm		
Speed of rotation of the swivel tube	60 degree/s		
Swing pipe angle	IPX3 : 120°; IPX4/IPX4K : 350°		
Water volume flow	IPX3(L/min) : 1.1 ; IPX4(L/min) : 1.8		
Flow error range	±5%		

# Standard parameters for IPX5/6:

Item	Parameter		
Diameter of nozzles	IPX5 : 6.3mm;		
Diameter of flozzies	IPX6: 12.5mm		
Water flow	IPX5: 12.5±0.625 L/min;		
	IPX6: 100.0±5.0L/min		
Spray direction	Spray from back to front		
Nozzle angle	Fixed, manually adjustable		
Spray distance	2.7m		

#### Remark:

- 1 The pictures in this document are for customer reference only, and there may be color differences between the actual model and the pictures.
- 2 This document only lists some test standards, which does not mean that other test requirements and standards cannot be conducted. Welcome to communicate and discuss with us.
- 3 One test only at the same time. The next project can be only carried out after the current test is completed. In addition, we can provide multifunctional customized test solutions according to user requirements.
- 4 Standard load-bearing upper limit of turntable is 50kg,but also can be customized per requirements. Turntables of φ200mm are provided for replacement.
- 5 This model is adjusted by a flowmeter, and the upper surface of the float is aligned with the scale to read the data; if you need to export the test data, you can choose a flow sensor. When reading the flowmeter, the second digit after the decimal point is the estimated reading data, not accurate data; if the user is concerned about the accuracy of the data, a flow sensor can be selected through negotiation.
- 6 Please inform in advance if the voltage(220V) does not match the actual needs so that we can provide customized solutions for you.
- 7 At present, only Chinese and English interfaces are supported; if other languages are introduced, the software can be updated remotely.
- 8 It is recommended to set the test time according to the test standard. The water temperature will rise due to long time test which has an impact on the test results.
- 9 The data is calculated based on the dripping area, IPX1: $0.6 \times 0.6 \times (0.001 0.0015) = 0.00036 0.00054 m^3/min(that is 0.36 0.54 L/min)$ .
- 10 200mm is the distance from the nozzle to the sample specified in the standard, and the user needs to adjust the height of the turntable to meet the distance requirement.
- 11 Multiple specifications of pendulum tubes can be provided, please confirm clearly before placing an order; if other specifications are added after purchase, the equipment needs to be returned to the factory to replace hardware and programs.
- 12 The specifications of swing pipe for IPX3/4 rain test, as shown in the figure below:

Table 9 – Total water flow rate  $q_{\rm V}$  under IPX3 and IPX4 test conditions – Mean flow rate per hole  $q_{\rm VI}$  = 0,07 l/min

Tube radius R	Degree IPX3		Degree IPX4	
	Number of open holes N <sup>1</sup> )	Total water flow q <sub>v</sub> I/min	Number of open holes $N^{1}$	Total water flow q <sub>v</sub> I/min
200	8	0,56	12	0,84
400	16	1,1	25	1,8
600	25	1,8	37	2,6
800	33	2,3	50	3,5
1 000	41	2,9	62	4.3
1 200	50	3,5	75	5,3
1 400	58	4,1	87	6,1
1 600	67	4.7	100	7,0

<sup>1)</sup> Depending on the actual arrangement of the hole centres at the specified distance, the number of open holes N may be increased by 1.

13 The photos may not match the actual ones, and are for user reference only.

# Product detail display:



socket

Tags: IPX1-6 Waterproof Grade Test Machine, hstrument Protection Testing Equipment, Waterproof Test Chamber

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