

# IPX1 IPX2 IPX3 IPX4 IPX5 IPX6 Waterproof Testing Equipment 380V 50HZ

## **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-IPX16B-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**

Test Function:
IPX1 IPX2 IPX3 IPX4 IPX5 IPX6

Window Material: Tempered Glass

• Turntable Tilt: 0°or 15°(horizontal Direction)

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

Powerful Water Spray

Rotating Speed: 1-5 Rounds Per Minute
Controller: 7-inch Touch Screen + PLC

• Turn Table Load Bearing: 40KG

• Alternative Name: Environment Simulation Device , IP Grade

Testing Machine

• Highlight: IPX6 Waterproof Testing Equipment,

IPX5 Waterproof Testing Equipment, Waterproof Testing Equipment 380V



## **Product Description**

#### IPX1 IPX2 IPX3 IPX4 IPX5 IPX6 Waterproof Testing Equipment 380V 50HZ

#### Generl specifications:

| Dimension    | Outer : Approx W 1350×D 3700×H 1920<br>(mm);<br>Inner : W 900×D 900×H 1050 (mm)<br>External : steel plate;<br>Internal : 304 stainless steel |  |
|--------------|--|--|
| IMATERIAL    |  |  |
| Power supply | 380V/50HZ  |  |
| Power        | 2.5kW  |  |

### **Product description:**

The IPX1-6 Waterproof Test Chamber is designed to simulate various levels of water ingress protection, ranging from IPX1 dripping water test to IPX6 powerful water jet resistance. It ensures product durability by exposing samples to precise water exposure conditions, from gentle dripping to high-pressure sprays. Therefore, it's essential for verifying IP ratings of electronics, automotive components, and outdoor gear, ensuring reliability in harsh environments.

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?

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 <sup>6</sup>.

There is a waterproof lighting inside, which is convenient for users to observe the test situation.

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.

#### Standard parameters for IPX1/2:

| Item                          | Parameter       |  |
|-------------------------------|-----------------|--|
| Drip area                     | 600×600mm       |  |
| Diameter of nozzles           | 0.4mm           |  |
| Distance between nozzles      | 20mm            |  |
| 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°;<br>IPX4/IPX4K : 350°        |  |  |
| Water volume flow                    | IPX3(L/min) : 1.1 ;<br>IPX4(L/min) : 1.8 |  |  |
| Flow error range                     | ±5%                                      |  |  |

## Standard parameters for IPX5/6:

| Item                         | Parameter                  |
|------------------------------|----------------------------|
| Diameter of nozzles          | IPX5 : 6.3mm;              |
|                              | 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 <sup>13</sup> | 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 multi-functional 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, IPX1:0.6×0.6×(0.001-0.0015)=0.00036-0.00054m³/min(that is 0.36-0.54L/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<br>R<br>mm | Degree IPX3                           |                                 | Degree IPX4              |                                 |
|------------------------|---------------------------------------|---------------------------------|--------------------------|---------------------------------|
|                        | Number of open holes N <sup>1</sup> ) | Total water flow q <sub>v</sub> | Number of open holes N1) | Total water flow q <sub>v</sub> |
| 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 This distance is the range from the nozzle to the center of the turntable. If the user wants to extend the spraying distance, he needs to explain in advance.
- 14 The user needs to prepare an air compressor in advance (recommended gas storage capacity > 40L). If you need us to buy it on your behalf, you need to explain in advance.
- 15 The photos may not match the actual ones, and are for user reference only.

#### The product images:



flow meter

Tags: IPX1-6 Waterproof Grade Test Machine, Waterproof Test Equipment, DeviceProtection Testing Equipment



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