

# IPX5 IPX6 Water Jet Test Chamber

IEC 60529 Hose Nozzle Tester

Professional Technical Datasheet

Standards: IEC 60529 IPX5 & IPX6

Manufacturer: KingPo Test Equipment Co., Ltd.

Tel: +86-769-81627526      Website: [www.dgkingpo.com](http://www.dgkingpo.com)



## 1. Product Overview

The KingPo IPX5 IPX6 Water Jet Test Chamber is a highly efficient dual-purpose testing system designed to perform both IPX5 and IPX6 water jet tests according to IEC 60529 within a single unit. It features quick-change precision nozzles ( $\Phi 6.3$  mm for IPX5 and  $\Phi 12.5$  mm for IPX6), making it ideal for laboratories and manufacturers seeking to save space, reduce costs, and streamline compliance testing.

With precise flow and pressure control, adjustable turntable, and robust construction, it delivers repeatable and reliable results for validating the waterproof performance of electrical enclosures, automotive parts, lighting fixtures, and industrial equipment.

## 2. Key Advantages

- **Precision Interchangeable Nozzles**

High-accuracy SUS304 nozzles ( $\Phi 6.3$  mm for IPX5,  $\Phi 12.5$  mm for IPX6) manufactured per IEC 60529 specifications.

Ensures exact flow rates and stream geometry with rapid switching between test modes.

- **Dual-Level Flow & Pressure Control**

Independent closed-loop control for IPX5 (12.5 L/min) and IPX6 (100 L/min).

Provides stable and repeatable test conditions for both protection levels.

- **Adjustable Rotating Turntable**

$\Phi 600$  mm SUS304 turntable with 1–10 rpm speed and 500–1500 mm height adjustment ( $\leq 80$  kg load).

Guarantees uniform exposure from all directions.

- **Advanced PLC + Touchscreen Control**

Intuitive HMI for easy mode selection, real-time monitoring, and data logging.

Reduces human error and supports full traceability.

- **Robust SUS304 Stainless Steel Construction**

Full stainless steel chamber with integrated recirculating water system and multi-stage filtration.

Offers excellent corrosion resistance and long service life.

- **Efficient Water Recirculation System**

Closed-loop water management with filtration.

Maintains stable performance while minimizing water consumption.

### 3. Technical Specifications

#### 3.1 Performance Parameters

Parameter	Specification	Notes
IPX5 Nozzle	Φ6.3 mm	Water jet testing
IPX6 Nozzle	Φ12.5 mm	Powerful water jet testing
IPX5 Flow Rate	12.5 L/min ±5%	Core stream ≈40 mm at 2.5 m
IPX6 Flow Rate	100 L/min ±5%	Core stream ≈120 mm at 2.5 m
Test Distance	2.5–3.0 m	Per IEC 60529
Turntable Speed	1–10 rpm	Adjustable
Turntable Load Capacity	≤ 80 kg	Standard

#### 3.2 Mechanical Structure

Parameter	Specification	Notes
Chamber Material	SUS304 Stainless Steel	Corrosion resistant
Turntable Diameter	Φ600 mm	Customizable available
Turntable Height	500–1500 mm	Adjustable
Water System	Recirculating + multi-stage filtration	Stable flow and pressure
Construction	Full stainless steel chamber	High durability

#### 3.3 Electrical & Control System

Parameter	Specification	Notes
Control System	PLC + 7-inch Touchscreen HMI	Real-time monitoring & logging
Nozzle Switching	Quick interchange system	IPX5 ↔ IPX6
Power Supply	AC 380V, 50Hz	Three phase
Safety Protection	Emergency stop, leakage protection	Full interlocks

## 4. Test Procedure (IEC 60529)

1. Install the appropriate nozzle ( $\Phi 6.3$  mm for IPX5 or  $\Phi 12.5$  mm for IPX6).
2. Secure the test specimen at the center of the turntable and adjust height/position.
3. Set the correct test distance (2.5–3.0 m) and stabilize flow rate and pressure.
4. Perform the test for the required duration (minimum 3 minutes or 1 min/m<sup>2</sup>) with turntable rotating.
5. Inspect specimen for water ingress and record all test parameters.

Fully compliant with IEC 60529 IPX5 and IPX6 water jet testing requirements.



## 5. Typical Applications

- Automotive electrical components and connectors
- Outdoor lighting and LED luminaires
- Electrical enclosures and control cabinets
- Power distribution and industrial equipment
- Certification laboratory compliance testing

## **6. Optional Modules & Ordering Information**

- ISO/IEC 17025 accredited calibration report
- Custom turntable sizes
- Enhanced data logging software

## **7. Compliance & Manufacturer**

This system is designed and manufactured in strict accordance with IEC 60529 for IPX5 and IPX6 testing. Factory calibration certificate provided as standard.

KingPo Test Equipment Co., Ltd.  
Hengkeng Industrial Zone, Dongguan, Guangdong, China  
Tel: +86-769-81627526  
Website: [www.dgkingpo.com](http://www.dgkingpo.com)  
Email: [sales@dgkingpo.com](mailto:sales@dgkingpo.com)

Precision Metrology • Regulatory Compliance • Engineering Reliability