



Non-electric fiber unit

# IPA valve\* stroke detection help

\*A valve used for isopropyl alcohol



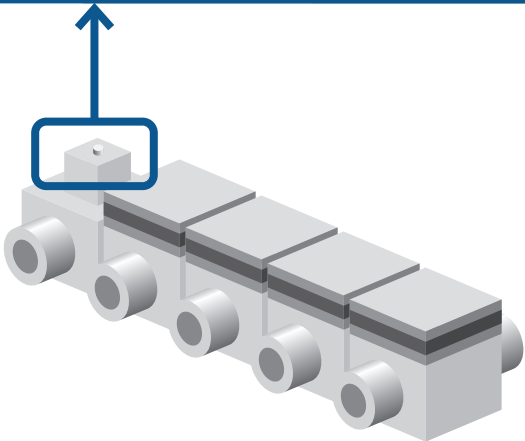
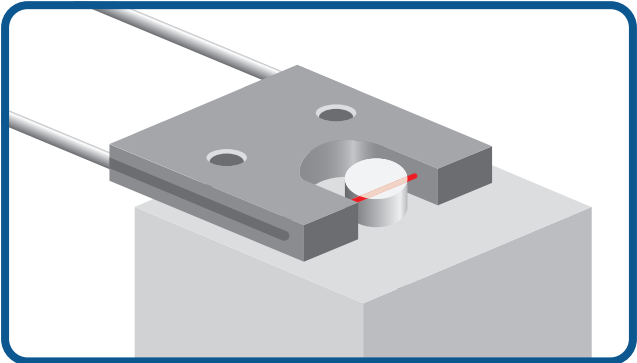
Product name	Discrete sensors Flat U-Shape fiber unit
Model No.	HPF-T054-L05

Process and equipment name	General front-end , single wafer cleaning system
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## Current Situation

- IPA valve problems worsen because they cannot be detected immediately.
- Specifications for sensors vary depending on chemical solution.
- Through-beam photosensors do not have a display or settings.

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## Current Issues

- Problem 1**  
There are no through-beam photosensors that can be used in an IPA environment.
- Problem 2**  
Design of the valve stroke detection mechanism cannot be standardized.
- Problem 3**  
The cause of errors is difficult to locate because the state at the time of occurrence cannot be checked.

## Solution 1

### Non-electric fiber unit can be used in an area with IPA.

Photosensors with electrical circuits/components cannot be used in IPA or other explosive atmospheres.

This product can be used in explosive atmospheres by installing the fiber unit in the dangerous area and the amplifier unit in a safe area.

*Before use, carefully read the explosion protection regulations that apply to the facility and equipment where you plan to use the fiber unit.*

## Solution 2

### Product installation specifications are the same as those for through-beam photosensors from other manufacturers.

Redesign work is not necessary because the installation holes and optical axis position are the same as those for other manufacturers.

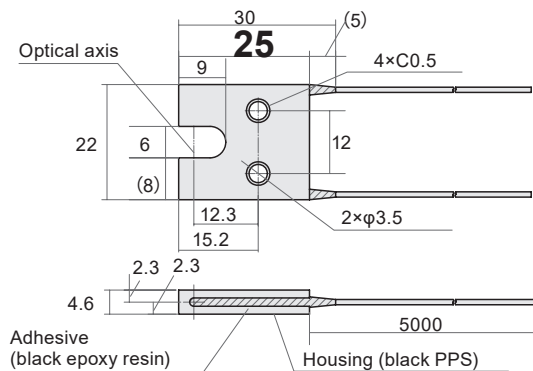
## Solution 3

### Light intensity can be checked and threshold can be adjusted.


The light intensity value is shown on the combined amplifier unit.

This is helpful when checking a problem and trying to identify its cause.

### External dimensions (unit: mm)



### Through-beam

Type	Beam direction	Appearance	Cable		Scanning distance (mm)		Core	Minimum detectable size (mm)	Model No.
			Bend radius	Length	Amplifier	Mode			
Flat U	—	 -30 ~ +70 °C U-shape	R15	5m Cutttable	HPX-EG00/01	nL 6 SF 6 Ft 6	φ0.5	φ0.005	HPF-T054-L05
					HPX-EG50/51	HP 6 nL 6 Fi 6			

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## Azbil Corporation

Advanced Automation Company

Yamatake Corporation changed its name to Azbil Corporation on April 1, 2012.

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