



Automatic Fire Monitor

ZDMS 0.6/5S

ZDMS 0.8/10S

CONTENT

Safety Introduction.....	1
System Introduction.....	2
System General Parts List.....	3
System Site Installation Layout.....	4
Installation.....	5
Operation.....	7
Specification.....	9
Technical Parameters.....	9
Dimensions.....	10
Working Path.....	10

Safety Instruction

- All operators must receive training in safety and usage.
- Before installation and use, please read this manual carefully to ensure the correct installation of the this device.
- No obstacles blocking the detection and positioning of the fire extinguishing device within the scope of protection to ensure that there are no blind spots in the area.
- Before the fire extinguishing device working, check whether all personnel (firefighters and civilian personnel) are away from the water flow path, and confirm that the direction of the water flow will not cause unnecessary property damage.
- To avoid exposing personnel to dangerous fire conditions, this fire extinguishing device should be operated remotely as much as possible.
- Do not attempt to shut-off or operate any electrical equipment in this system before confirming whether there is a power off or that the area is safe.
- Shut-off power and close manual gate valve before maintenance.
- Any modification to the electrical equipment in this system will destroy its safety and invalidate the warranty of the case and all parts and components inside.
- The equipment should be inspected regularly according to the instructions in the maintenance section.

The safety information and other information in this manual are preceded by warning and attention signs. Please check the relevant contents carefully.

! WARN

Please strictly follow the warning icon, otherwise could result in serious personal injury or product failure.

! ATTENTION

Please read the notes and regulate the operation, or may result in product failure or property damage.

Note: Relevant matters do not necessarily directly lead to personal injury, but reminders to ensure that the relevant safety information is understood by the installation and operating personnel as much as possible to prevent personal or property damage.

System Introduction

ZDMS series automatic tracking and positioning jet fire extinguishing device is an organic combination of infrared / ultraviolet sensing technology, signal processing technology, communication control technology, computer technology and mechanical transmission technology, which can automatically monitor fires within the protection range around the clock.

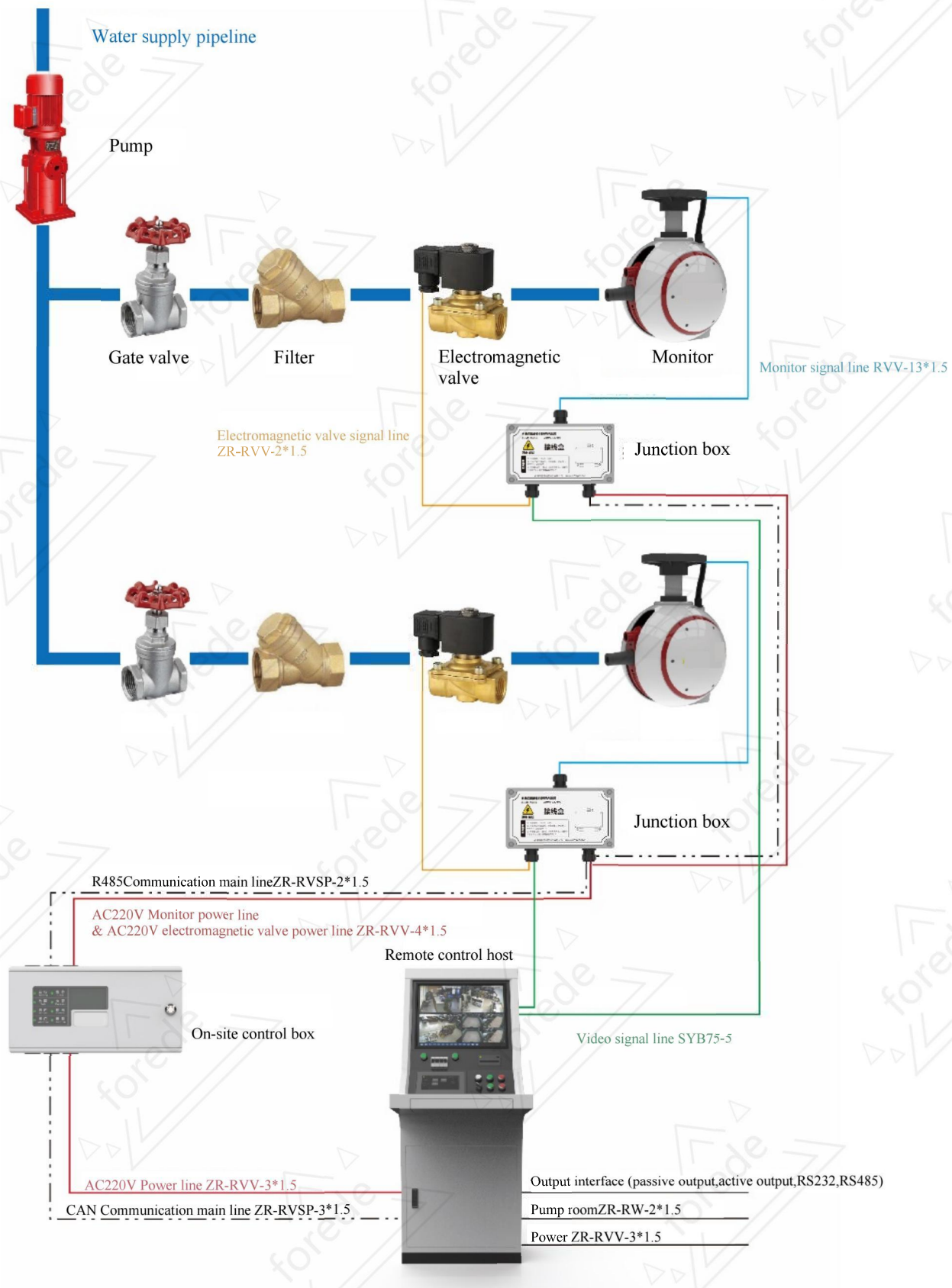
Once a fire occurs, the device starts immediately. Two-dimensional scanning of the fire in the horizontal and vertical directions. After determining the direction of the fire, the central controller issues a command and sends out a fire alarm signal. At the same time, the water pump, valve and fire extinguishing device are started jetting water by aiming at the fire source. After the fire source is extinguished, the central controller will issue a command to stop the water injection. If there is a new fire source, the fire extinguishing device will repeat the process, and will return to the monitoring state after all the fire sources are extinguished.

The water injection form of this device is cylindrical water injection, with long range, wide protection range, and very strong for fire extinguishing ability. It can be widely used in indoor buildings with large area and large space, such as: station waiting room, airport, passenger terminal, sports hall, convention and exhibition center, movie theater, dance hall, exhibition hall, shopping mall, etc.

● System General Parts List :

Product	Product Name	Model	Function	Configuration
	ZDMS fire extinguishing device (fire monitor)	ZDMS 0.6/5S ZDMS 0.8/10S	Fire detection, targeting and extinguishing	Standard
	The electromagnetic valve (DN50)	DCF(DN50)	Turn on and off water flow	Standard
	Junction Box	JXH-5	Wiring terminal for easy wiring	Standard
	On-site control box	XCKZ	Installed in the protection site, used to receive and send relevant instructions and control fire extinguishing devices and solenoid valves, can control 1 fire extinguishing devices	Standard
	Remote control host	YCKZ	Installed in the central control room, remotely monitor the status of the protection site and control any connected fire extinguishing device, up to 99 on-site area control boxes	Optional
	Filter	GLQ	Installed in front of solenoid valve to filter water quality	Optional

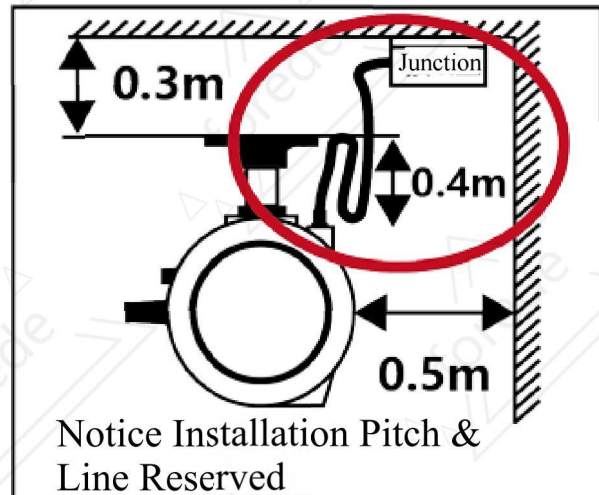
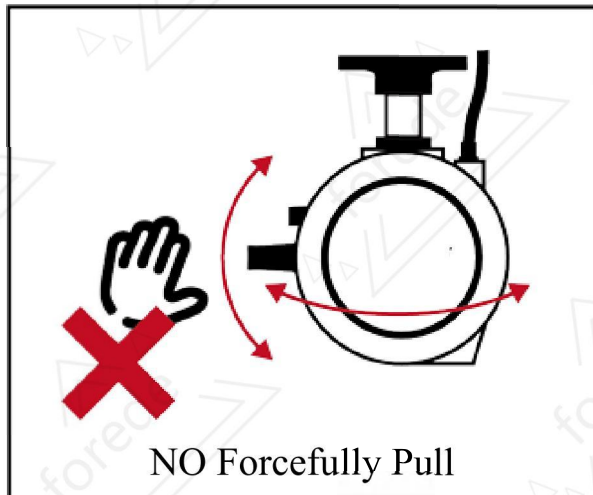
- **System Site Installation Layout:**



Installation

● ZDMS Installation :

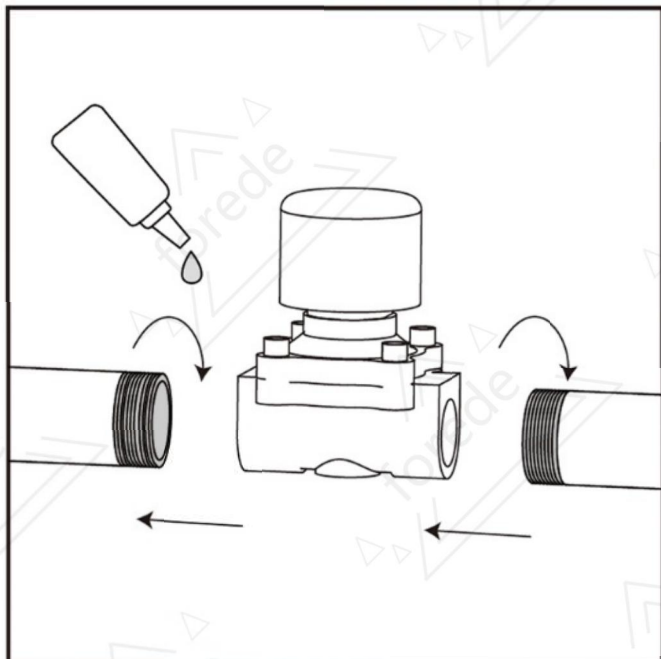
! WARNING



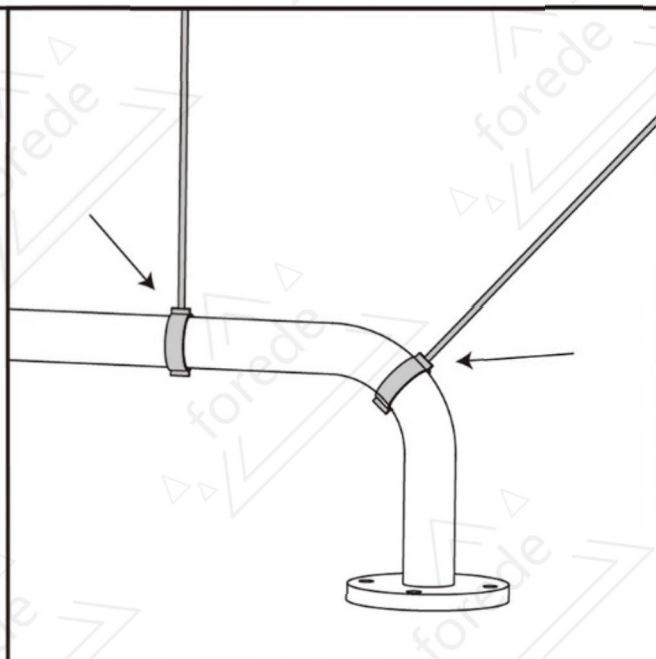
- Ban to directly rotate the casing of this device or forcefully pull the nozzle during installation to avoid damage to the rack gear structure and the motor
- There must be no obstacles within 0.5 meters in diameter of the installation point of the device, so as not to affect the rotation of the monitor body; The gap between the flange mounting surface of the device and the ceiling or beam should be no less than 0.3m
- The fixed position of the junction box must ensure that the cable leading out of the device is more than 0.4 meters away from the flange surface of the device, so as to ensure that the cable will not be damaged when the device rotates 360 °

! ATTENTION

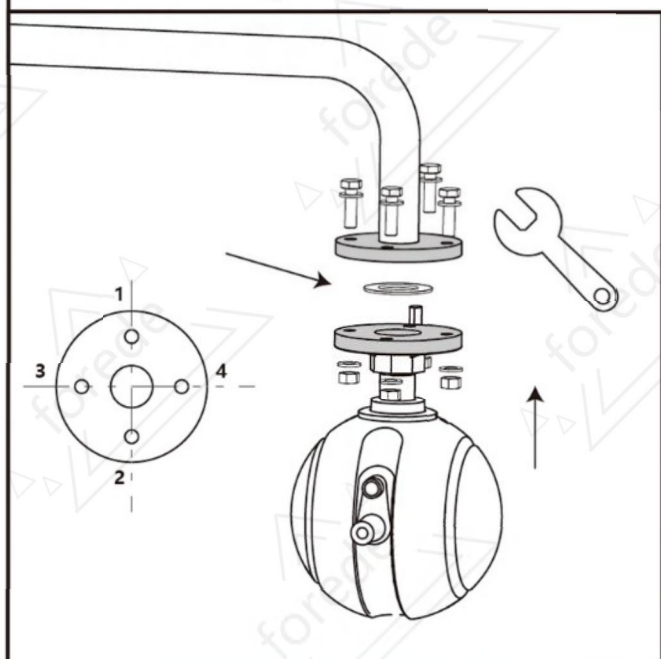
- the device has its own weight, and the capacity of pipe network for installation should be considered before installation. If necessary, can strengthen the frame of pipe network to meet requirement the jetting reaction force
- The device should be flushed and pressure tested after the pipeline installation is completed
- The pipeline connected to the flange of the device should be vertically downward to ensure that the nozzle is horizontal after the device is installed
- For the pipeline connected to the device flange, the flange plane must be level to prevent tilting
- The direction of the nozzle should back the protection range after installation
- Handle and place gently when installing to prevent collision



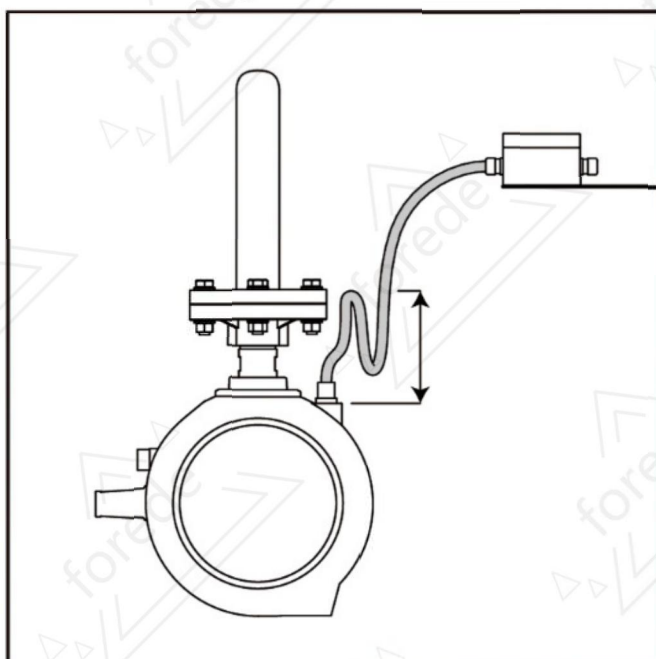
1. Apply sealant to the water pipe thread, rotate the solenoid valve clockwise and install it on the water pipe, then apply sealant to the other end of the water pipe thread and screw it into the solenoid valve. Pay attention to the solenoid valve coil face up, and try to install horizontally.



2. The fixed bracket installation. The illustrated bracket installation is for reference only. Due to the different installation environment, there are different installation methods for the fixed bracket. Please select the most suitable installation method according to the site conditions.



3. Put the sealing ring between the flanges, align the mounting holes, insert the bolts (with flat washers), put the flat washers on the other side and screw on the nuts to fix them, then install the remaining three bolts and follow the illustration Tighten in sequence diagonally.



4. According to the site conditions, fix the junction box and ensure that the lead wire of monitor is more than 0.4 meters away from the length of the flange surface of monitor to avoid winding when the monitor rotates.

Operation

● On-site control box:



1. Left is status light: indications are following:

Light	Color	Status	Indications
Working	Green	Box working or not	Light On: working; Light out: outage
Fault	Yellow	Faults or not	Light On: faults; Light out: normal
Silenced	Green	Silenced or not	Light On: runing; Light out: sound
Valve Power	Green	Valves working or not	Light On: working; Light out: outage
E-Stop	Red	E-Stop on or not	Light On: E-Stop pressd; Light out: E-Stop reset
Fire Alarm	Red	Fire alarm on or not	Light On: fire alarm on; Light out: no alarm
Valve On	Green	Valve on or not	Light On: valve on; Light out: valve close
Pump On	Green	Pump on or not	Light On: pump on; Light out: pump off

• Valve Power refers to electromagnetic valve

2.LED is in the middle of on-site control box;

3.Direction keys are to control the monitor and to choose.

4. Right are operational keys, indications are following:

Keys	Indications
Valve	Electromagnetic valve on or not
Pump	Pump on or not
Silence	Silenced
SS/Fog	Change to stream or fog(Not for this type)
M/A	Change to manual or automatic control
Test	Check monitor working or not
Verify	Confirm operation
Reset	Reset the device to standby mode
Locating	Activate the device to automatically locate the fire point
Setting	Set parameters of device (only for product debugging)
Back	Return to the up-level

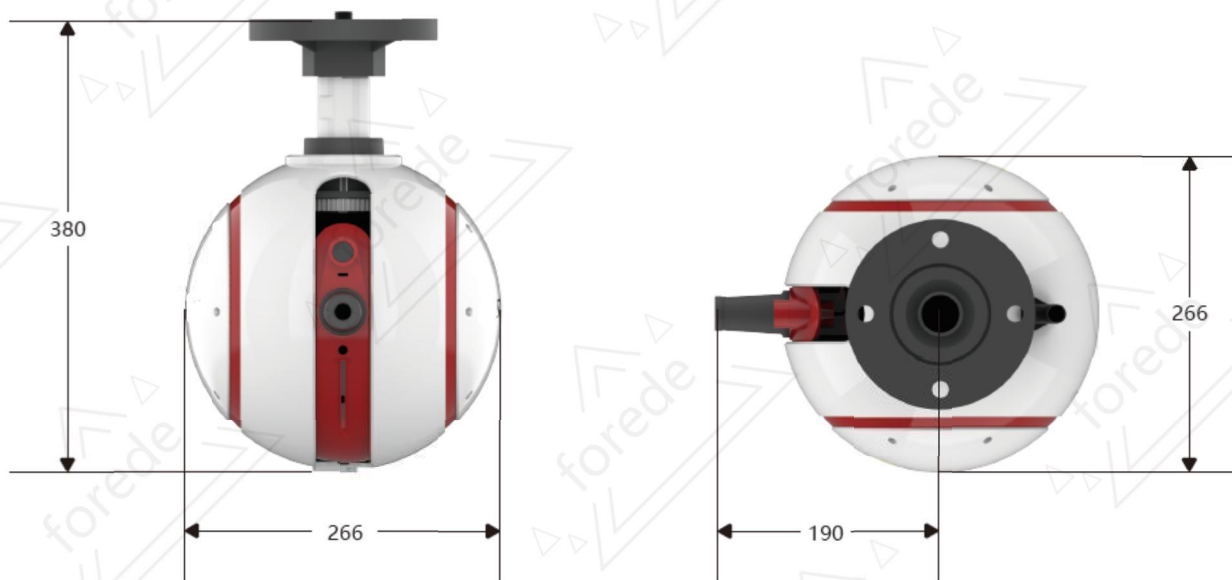
- The remote control host is mainly controlled through the touch screen on the host. Please see the manual for operation instructions.

Specification

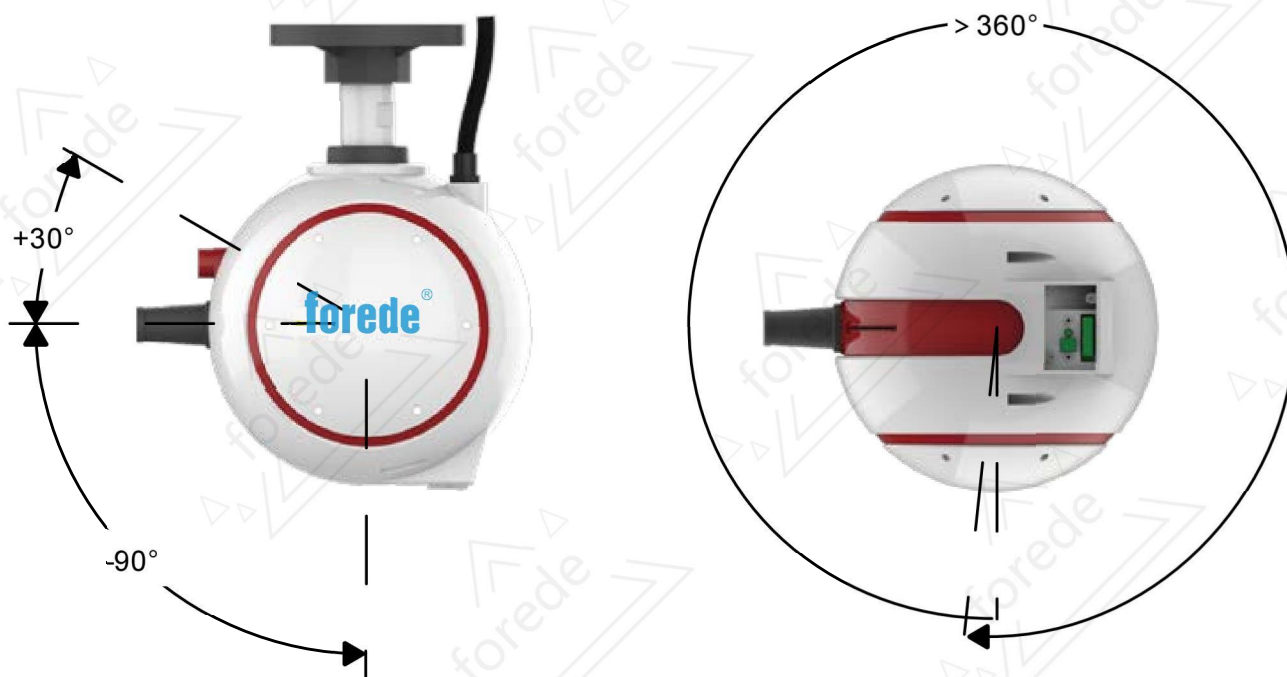
Technical Parameters:

Model	ZDMS 0.6/5S	ZDMS 0.8/10S
Working Pressure	0.6MPa	0.8MPa
Flow Rate	5L	10L
Jetting Range(R)	34m	39m
Protection Range(R)	30m	35m
Monitor Range(R)	50m	50m
Jetting Pattern	Column	
Mounting Height	6~15m	
Positioning Time	≤30s	
Horizontal Rotation Angle	> 360°	
Vertical Rotation Angle	-90°~+30°	
Working Voltage	AC220V	
Control Pattern	On-site manual/Remote&manual /Automatic	
Communication Mode	RS485	
Power Consumption	Monitor: 1W; Scan: 50W	
Detector Type	Red ultraviolet recombination	
Connection Size	DN50 (GB/T 9112~9124-2010; PN16)	
Installation	Hoisting	
Standard	GB 25204-2010	

Dimensions



Working Path



www.forede.com

Automatic Fire Monitor