



FIRE MONITOR / CANNON MANUAL 24Vdc ELECTRIC CONTROLLED

**PSKD20-40B**

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## ■ PRODUCT SAFETY INFORMATION

- All personnel who may be expected to operate this equipment must be thoroughly trained in its safe and proper use.
- Before flowing water from this device, check that all personnel (fire service and civilian) are clear of the stream path. Also confirm stream direction will not cause avoidable property damage.
- Become thoroughly familiar with the hydraulic characteristics of this equipment, as well as the pumping system used to supply it.
- Whenever possible, this equipment should be operated from remote location to avoid exposing personnel to dangerous fire conditions.
- Always open and close valves slowly to avoid water hammer.
- After each use, and on a scheduled basis, inspect equipment per instructions in the maintenance section.
- Keep fingers and hands clear of moving parts.
- Disconnect power before servicing and electric valve or electric valve controller.
- Any modifications to the electrical will destroy the IP-66 rating and void warranty coverage of the enclosure and all components within.

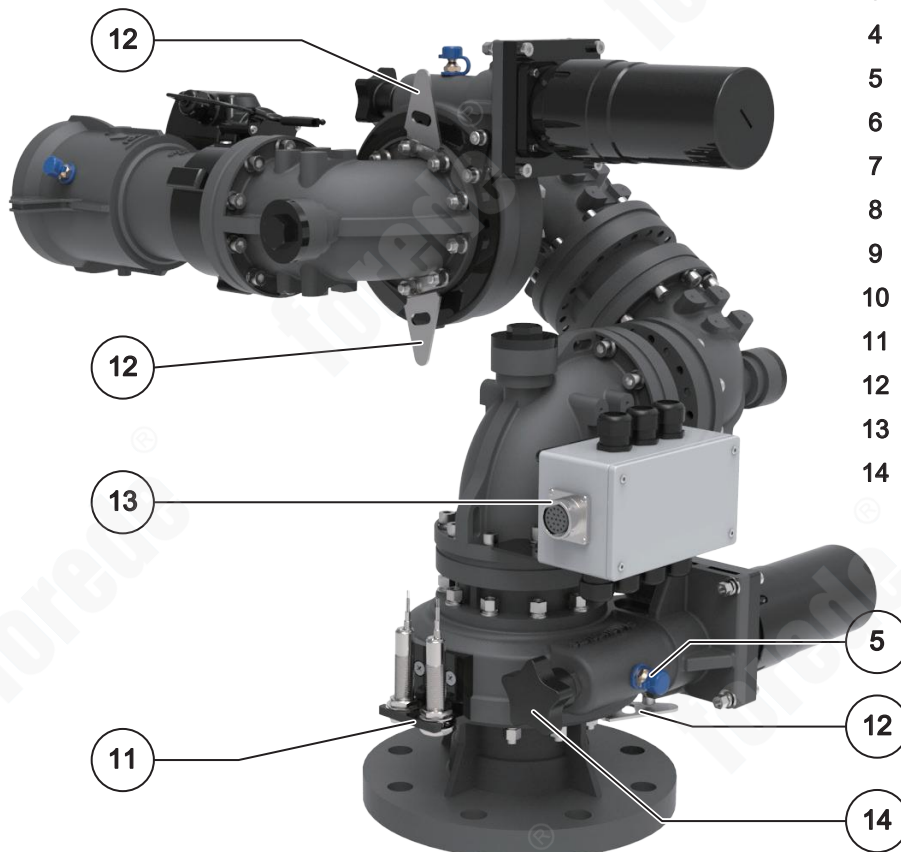
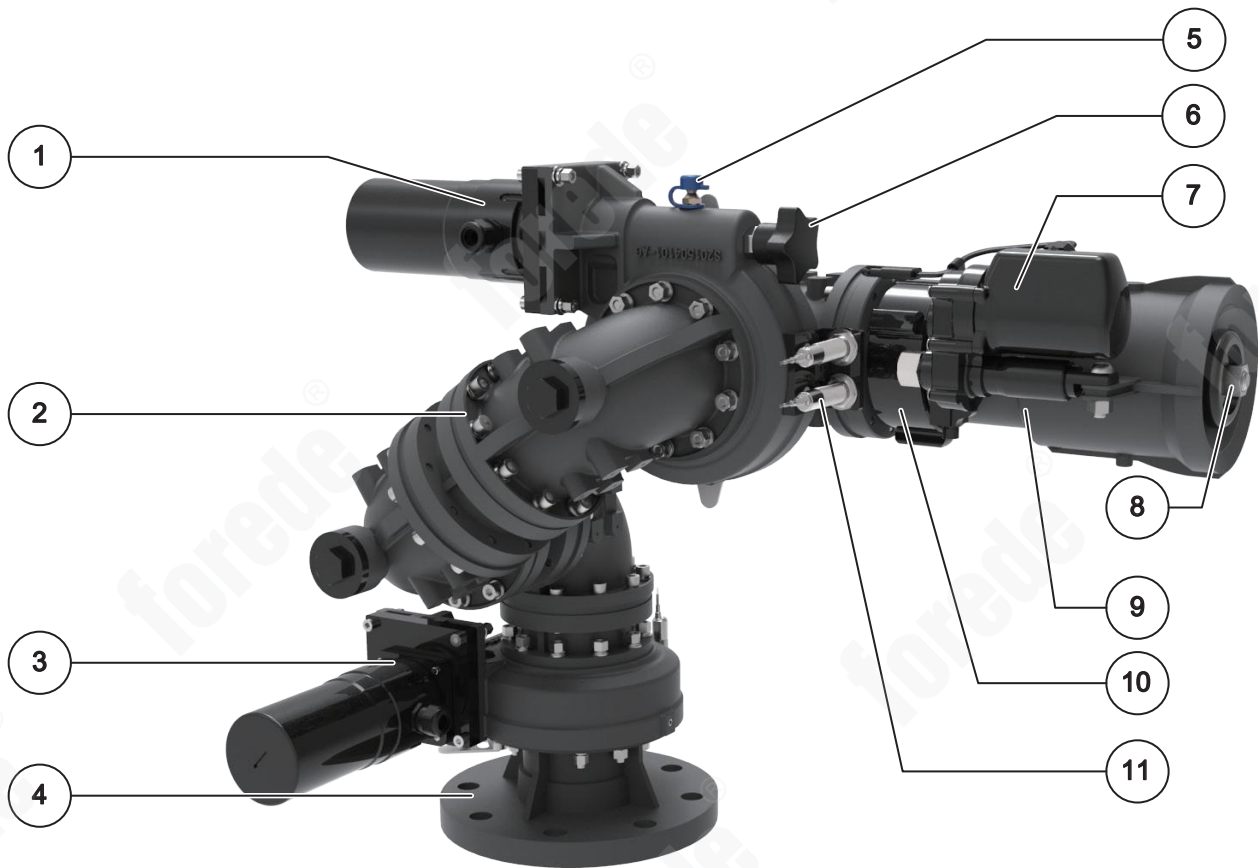
### Important

Before installing and operating this equipment, read this manual thoroughly. Proper installation is essential to safe operation.

### Warning

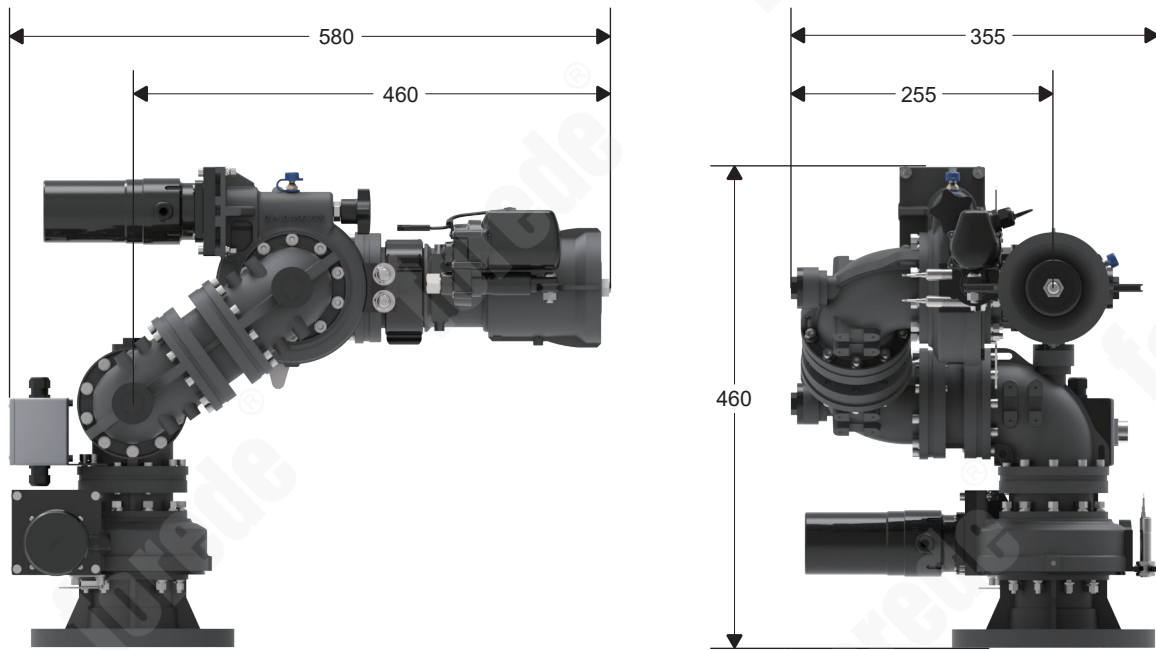
Do not attempt to disconnect or work on any electrical equipment in this system unless power is removed or the area is known to be non-hazardous.

## MONITOR DESCRIPTION

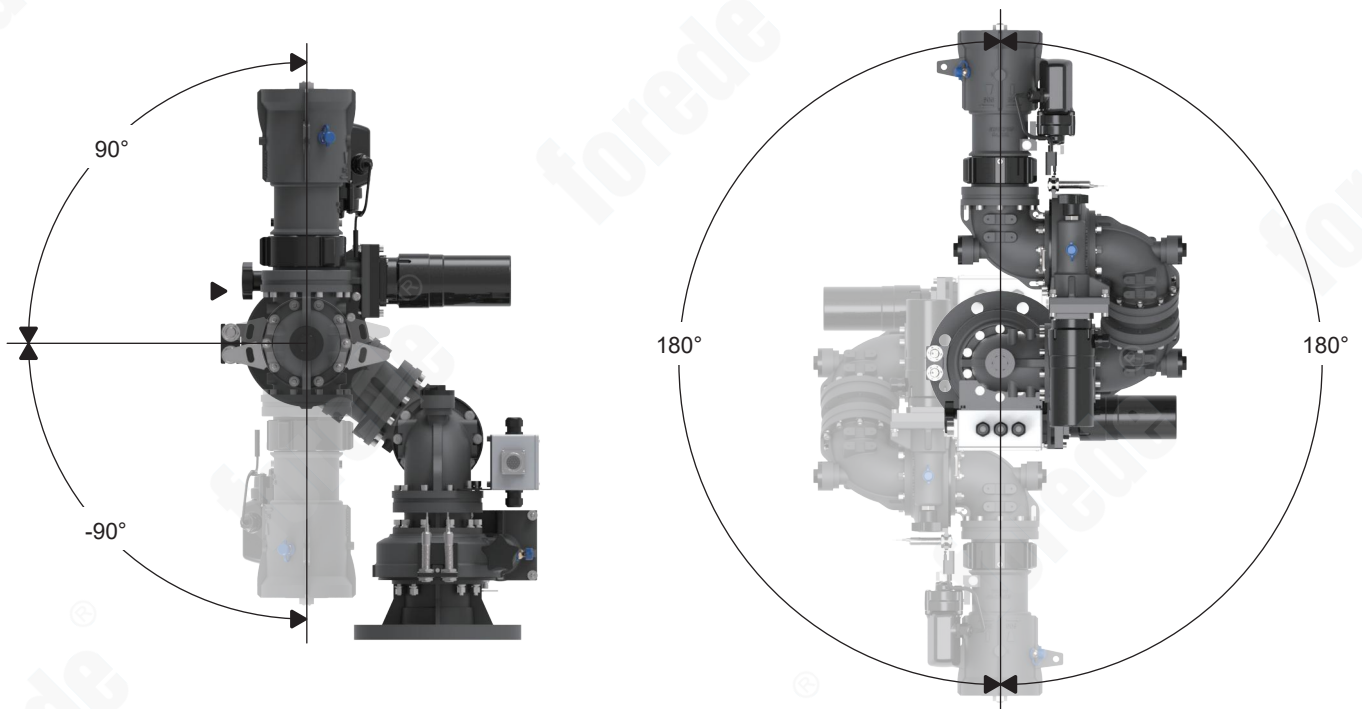


- 1 Gear Motor With Stainless Steel Cover (Vertical)
- 2 2.5" Waterway Aluminum Casting Anodized Grey
- 3 Gear Motor With Stainless Steel Cover (Horizontal)
- 4 2 1/2" Inlet Flange
- 5 Grease Nipple
- 6 Vertical Manual Override
- 7 IP67 Sealed Nozzle Actuator
- 8 Adjustable Flow Nozzle Stem
- 9 PTZC-P-40D Nozzle
- 10 2.5" NH Discharge
- 11 End Position Sensor
- 12 End Position Bolts
- 13 Junction Box
- 14 Horizontal Manual Override

## ■ OUTLINE DIMENSIONS



PSKD30 FIRE Monitor Outline Dimensions (MM)



PSKD20-40 FIRE Monitor Rotation Envelop

### Important

Before mounting fire monitor, ensure that both the horizontal and vertical rotation envelopes are clear of all obstructions. See below figures for envelope dimensions. The rotation limits are determined by the limit bolts locations on the monitor flange, and can be adjusted.

## SYSTEM COMPONENTS DESCRIPTION

| NAME              | FIRE MONITOR BODY                                                                   | 24Vdc ELECTRIC JET SPRAY NOZZLE                                                                      | JOYSTICK                                                                             |
|-------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| PART IMAGE        |    |                     |   |
| PART#             | PSZC-65B                                                                            | PTZC-P-40D                                                                                           | CTRL-J01                                                                             |
| BRIEF DESCRIPTION | 24Vdc Electric remote controlled                                                    | Selectable flow rates Of                                                                             | Up-down-left-right,straight stream/fog function                                      |
|                   | 2 ½ "NH outlet                                                                      | 1200 LPM 1800LPM 2400LPM @ 100PSI                                                                    | Power indicator                                                                      |
|                   | Aluminum casting anodized 2 ½" waterway                                             | IP67 standard seal actuator                                                                          | Aluminum base                                                                        |
|                   | Stainless steel worm , Aluminum gear                                                | Fixed fog teeth                                                                                      |                                                                                      |
|                   | 2 ½" ANSI 150# Inlet flange                                                         |                                                                                                      |                                                                                      |
| NAME              | CONTROL UNIT                                                                        | STRAIGHT NOZZLE (Optional)                                                                           | CABLES                                                                               |
| PART IMAGE        |   |                   |  |
| PART#             | CU-01                                                                               | PTZC-Z-30                                                                                            | CTRL-CB01 / CTRL-CB02                                                                |
| BRIEF DESCRIPTION | Aluminum cover                                                                      | Aluminum hard anodized straight nozzle<br>C/W inbuilt stream shaper – 30mm<br>end nozzle orifice tip | Joystick to control unit cable- 5m length                                            |
|                   | IP67 Standard sealed                                                                |                                                                                                      | Monitor to control unit cable- 12m length                                            |
|                   |                                                                                     | 2 ½" NH Female Inlet                                                                                 | Other length cables please specify                                                   |
| NAME              | RC RECEIVER (Optional)                                                              | RC TRANSMITTER (Optional)                                                                            |                                                                                      |
| PART IMAGE        |  |                   |                                                                                      |
| PART#             | CTRL - RCT01                                                                        | CTRL - RCR01                                                                                         |                                                                                      |
| BRIEF DESCRIPTION | Max. 150m                                                                           | Max. 150m                                                                                            |                                                                                      |
|                   | IP67 Standard sealed                                                                | IP67 Standard sealed                                                                                 |                                                                                      |
|                   |                                                                                     |                                                                                                      |                                                                                      |

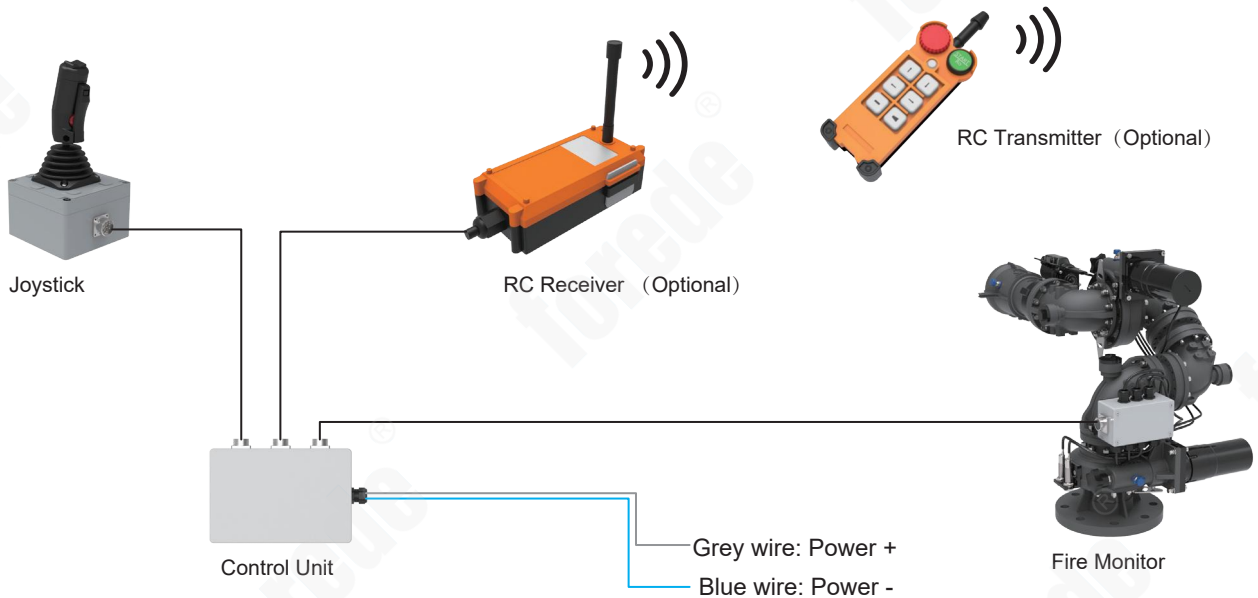
Part No. for two package:

- PSKD30-JS for the whole unit with jet spray nozzle (PTZC-P-40D).
- PSKD30-ST for the whole unit with straight nozzle (PTZC-Z-30).

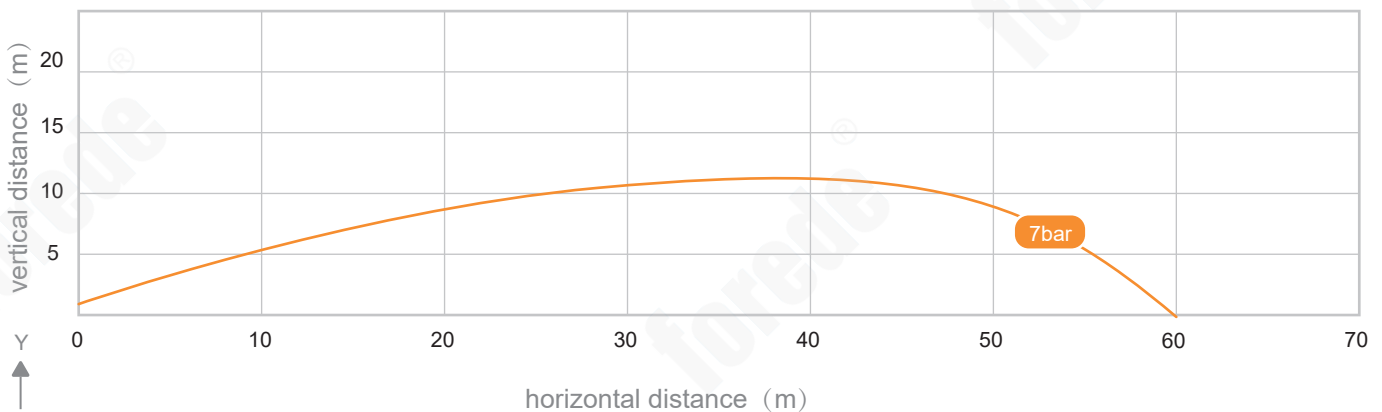
## TECHNICAL SPECIFICATION

|                                      |                                                                   |                               |                                          |
|--------------------------------------|-------------------------------------------------------------------|-------------------------------|------------------------------------------|
| Weight in Kg Incl. Nozzle Approx.    | 18.5KG                                                            | Range of Motion               | +90°/-90° vertical , 360°Horizontal      |
|                                      |                                                                   |                               | Other degrees adjustable                 |
| Material                             | Aluminum casting anodized body                                    | Speed (of high speed version) | 24°/sec rotation , 10°/ sec vertical     |
|                                      | Aluminum casting anodized nozzle                                  |                               |                                          |
|                                      | Stainless steel worm                                              | Power Consumption Max.        | 24V @ 7.5A                               |
|                                      | Aluminum gear                                                     | Power Supply                  | 24 VDC                                   |
| Flow Range @ 7 bar (Max recommended) | Nozzle Model: PTZC-P-40D<br>– 24Vdc Jet Spray Nozzle – Adjustable | Reaction Force                | Up to 900N                               |
|                                      |                                                                   | Mechanical Installation       | Support must withstand 4000 N of force   |
|                                      | Flow Rates of: 1200 LPM – 1800 LPM – 2400 LPM @100PSI             | Options                       | Network, radio remote , aux control etc. |
|                                      |                                                                   | Max. Reach @ 7 bar            | 60M                                      |

## INSTALLATION WIRING

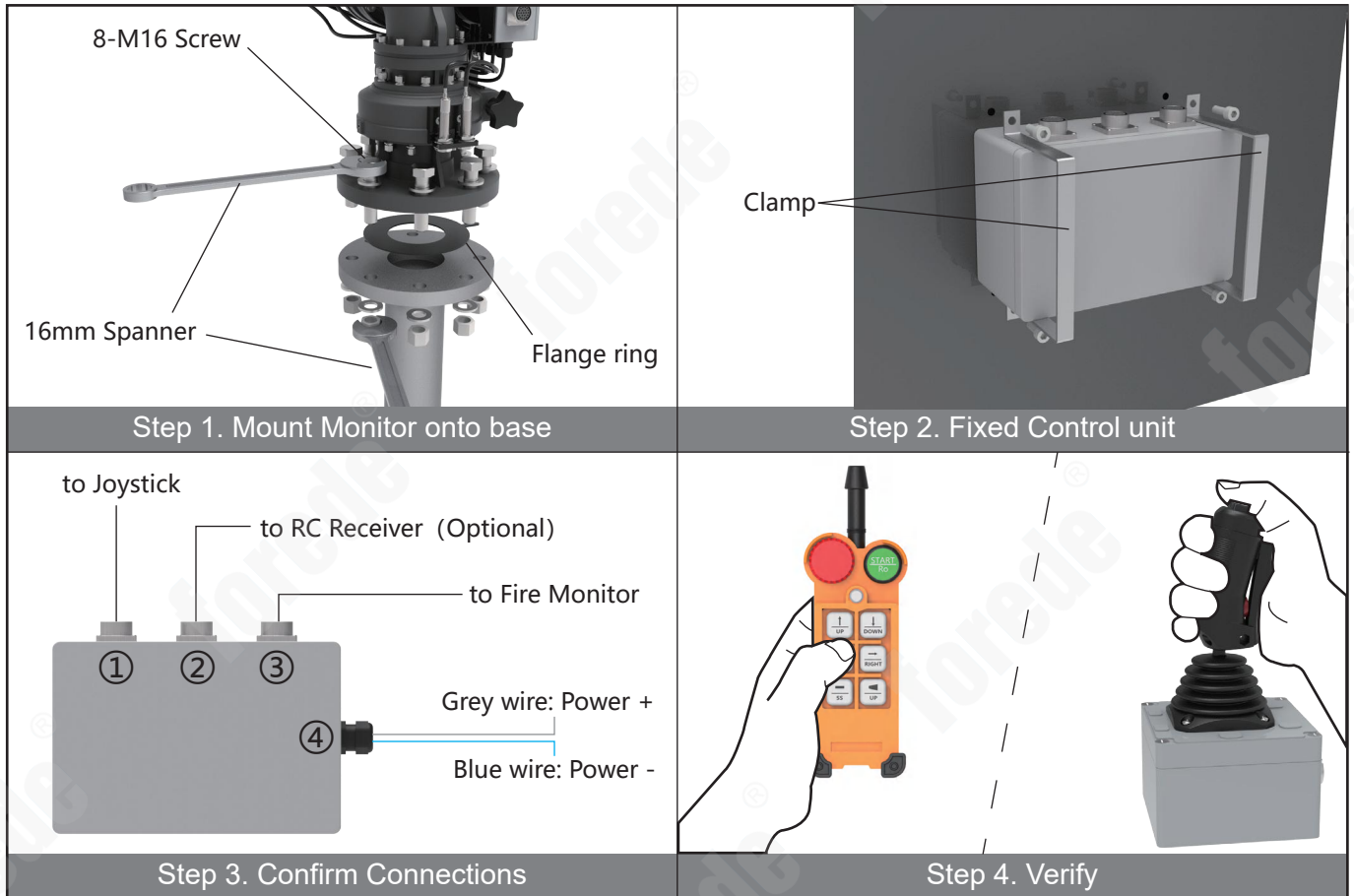


## PERFORMANCE CHART



Results may vary depending on testing conditions and the figures may be considered as an approximate guideline only.

## INSTALLATION INSTRUCTIONS



## TROUBLE SHOOTING

When the cannon stop moving no matter how we operate, then we can do as below:

- 1 If there are enough parts to exchange, then try to find out the faulty parts by exchanging parts.
- 2 If not, open the control unit and check the power light whether it is on. If it is on, there is no problem on power. Then check the 4 limit lights whether they turn on respectively when the joystick moves to each limit. (left, right, up and down). (see drawing on the right)
- 3 If all are ok, then check the sensors/limits on the cannon body. If the sensor lights are on all the time when you move the joystick, then the sensor is defective. The light only turns on when the cannon is close to the sensor. That is correct.
- 4 If you can not find out the problem, then contact the service people.

