



# **PRODUCT MANUAL**

## **FIRE EXTINGUISHER**

**Clean Agent (FE-36)  
2, 4 & 6 Kg Capacity**

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## **[KANEX FIRE EXTINGUISHER]**

### Store Pressure (CLEAN AGENT (FE-36))

### 2, 4 & 6 Kg Capacity

#### **INTRODUCTION**

This manual contains product description, installation, operating, maintenance, inspection and refilling for the KANEX brand Portable Stored pressure CLEAN AGENT (FE-36 ) type Fire Extinguisher of capacity 2, 4 or 6 Kg by weight of Charge. This model is designed to extinguish 'A', 'B' and 'C' type fires involving material like Wood, Paper, Cotton, Petro Chemical products, Paints, Resins, Pigment, Varnish, Gases in the compressed form like Oxygen, Acetylene, LPG, CNG and Electrical as well as electronic equipments.

#### **PRODUCT DESCRIPTION**

- The principal advantage of KANEX Portable type Stored Pressure CLEAN AGENT (FE-36) type Fire Extinguisher is that the fire extinguisher is handy type and it is easily handled by a single person.
- Body Shell made of Mild steel/SS sheet is constructed by welding and the shape of the body is cylindrical. The domes ends of the body are dished outwards.
- The charge, Clean Agent (FE-36) is an extinguishing media that gives blanketing effect on the fire to be put out. The Charge is actuated by N<sub>2</sub> gas stored in the container.
- The discharge of the Charge is by squeezing the lever of control valve. The Valve is made of forged Brass material.
- A Pressure gauge is attached to the valve body for inspection of in built pressure. The needle in the green zone in the dial of pressure gauge is the readiness of the extinguisher to be operated. The needle shifted in the red zone is an indication of under or excess pressure in the container and to refill the extinguisher.

KANEX clean Agent extinguishers have effective extinguishing agent, environmental acceptable and excellent substitute of Halon 1211. FE-36 extinguishing agent is a non corrosive, electrically non-conductive and free to residue.

FE-36 Clean Agent identified as HCFC Blend E from the US EPA. FE-36 has been carefully formulated in order to optimize both the physical and extinguishing characteristics. The ingredients used in FE-36 have been evaluated under the PAFT (Program for Alternative Fluorocarbon Toxicity testing) chronic toxicity testing program and have been confirmed to have no known chronic toxicity.. FE-36 Clean Agent gas is listed under USA Signification New Alternative Policy (SNAP) and approved by US EPA (Environmental Protection Agency). It is colorless .



## INSTALLATION

Installation of the KANEX Fire Extinguisher requires that the equipment be uncrated, placed in its proper position and secured in place with caster locks.

One set of accessories is packed with fire extinguisher for use in installation either attached with the body or loose in a packet. Please compare your supplied accessories with the following list.

Discharge Hose Pipe (300 mm for 2 Kg. 465 mm for 4 Kg capacity & 6 Kg capacity)  
Belt (For capacity 4 & 6 Kg)  
Wall Bracket

To assemble the Fire Extinguisher,

- Connect the nozzle or Hose Pipe to the valve. Rotation required connecting the nozzle or hose is in clockwise direction
- Provide the belt to the body at Bottom circumferential welding joint
- Keeping PVC discharge horn (open end of the hose) into the belt arms, tighten the nut bolts of Belt
- Ensure that the all above parts are firmly tightened with each other
- Affix the wall bracket ensuring adequate strength to the wall
- For installation pick up a convenient distance that shall not be longer than 15 meter from site and such a way that fire extinguisher can be easily driven from that location while required to fight with fire.

## OPERATION

- ✓ To be operated the Kanex fire extinguisher is held in an upright position
- ✓ The Discharge Hose is hold firmly in the hand.
- ✓ The safety sealing device is removed
- ✓ The locking pin is pulled
- ✓ The Lever of Valve is squeezed
- ✓ The discharge should be directed at the base of the flames
- ✓ On fires involving electrical or electronics equipments, discharge should be directed at the source of the flames.

There are two methods of directing the discharge to adopt the better extinguishment

- a) The most commonly used method of agent application on contained flammable liquid fires is to start at the near edge and direct the discharge in a slow, side-to-side sweeping motion, gradually progressing toward the back of the fire.
- b) The other method is called 'Over head application '. The discharge nozzle is directed in a dagger or downward position (at an angle of 45 degrees) toward the center of the burning area.



Generally, for spills fire, the side-to-side sweeping motion could give better results.

The discharge should be applied to the burning surface even after the flames are extinguished to allow added time for cooling and to prevent possible reflash.

## **PRINCIPALS OF OPERATION**

The Clean Agent( FE-36) agent extinguishes by blanketing on the Fire surface so that the oxygen levels are kept below the percentage required for combustion. The method of expulsion of Charge is by dry Nitrogen pressure stored in the fire extinguisher itself. The control discharge of the Charge is obtained by use of the spring loaded squeeze grip.

The discharge time for “KANEX” brand Portable type Clean Agent (FE-36) type Fire Extinguisher for 2 Kg varies from 8 to 12 second. The discharge time for the capacity 4 Kg varies from 8 to 14 seconds & for capacity of 6 Kg varies from 8 to 22 seconds. The discharge jet range of the discharge stream is more than 2 meter for 2 Kg and 3 meter for capacity of 4 Kg and 6 Kg. The percentage discharge of the extinguishing media is more than 95 %.

## **INSPECTION, MANINTENANCE AND RECHARGING**

The owner or the designated agent or occupant of a property in which fire extinguishers are located shall be responsible for inspection, maintenance and recharging.

### **INSPECTION:**

Fire Extinguisher shall be inspected when initially placed in service and then after at approximately 30 day intervals for routine maintenance. The inspection should be in following points of view.

- Safety Seals not broken or missing
- Visually damage, corrosion, leakage or clogged discharge connection
- Condition of nozzle, Hose Pipe, valve, wall bracket and fire extinguisher itself
- Inspection of the needle of pressure gauge (If the needle shifts to the red zone, send the extinguisher for refilling)

### **RECHARGING:**

It is important to reenergize the Fire Extinguisher as soon as possible to eliminate the potential of recombustion or fire. Each fire extinguisher shall have a tag or label securely attached that indicates the month and year recharging was performed and that identifies the person performing the service.

It is essential to recharge the fire extinguisher as soon as the extinguisher is used for either extinguishing the fire or used for demonstration. The extinguisher must be recharged at a stipulated time duration that is a due of refilling.



**[Clean Agent (FE 36)- Portable (Capacity 2 Kg)]**

| SR. NO. | DESCRIPTION                | MOC       | QTY. | UNIT |
|---------|----------------------------|-----------|------|------|
| 01      | Body                       | M.S.      | 01   | No.  |
| 02      | Valve                      | Brass     | 01   | No.  |
| 03      | Neck Ring                  | M.S./SS   | 01   | No.  |
| 04      | Siphon Tube                | Plastic   | 01   | No.  |
| 05      | Discharge Hose with Nozzle | EPDM      | 01   | No.  |
| 06      | Wall Bracket               | M.S.      | 01   | No.  |
| 07      | Pressure Gauge/indicator   | Brass     | 01   | No.  |
| 08      | Clean Agent (FE 36)        | HFC 236fa | 02   | Kg   |

**Fire Extinguisher Part List**

**[Clean Agent (FE 36)- Portable (Capacity 4 Kg)]**

| SR. NO. | DESCRIPTION                | MOC       | QTY. | UNIT |
|---------|----------------------------|-----------|------|------|
| 01      | Body Shell                 | M.S./SS   | 01   | No.  |
| 02      | Valve body                 | Brass     | 01   | No.  |
| 03      | Neck Ring                  | M.S./SS   | 01   | No.  |
| 04      | Siphon Tube                | Plastic   | 01   | No.  |
| 05      | Discharge Hose with Nozzle | EPDM      | 01   | No.  |
| 06      | Mounting Bracket           | M.S       | 01   | No.  |
| 07      | Pressure Gauge/indicator   | Brass     | 01   | No.  |
| 08      | Clean Agent (FE 36)        | HFC 236fa | 04   | kg   |

**[Clean Agent (FE 36)- Portable (Capacity 6 Kg)]**

| SR. NO. | DESCRIPTION                | MOC       | QTY. | UNIT |
|---------|----------------------------|-----------|------|------|
| 01      | Body Shell                 | M.S.      | 01   | No.  |
| 02      | Valve body                 | Brass     | 01   | No.  |
| 03      | Neck Ring                  | M.S.      | 01   | No.  |
| 04      | Siphon Tube                | Plastic   | 01   | No.  |
| 05      | Discharge Hose with Nozzle | EPDM      | 01   | No.  |
| 06      | Mounting Bracket           | M.S       | 01   | No.  |
| 07      | Pressure Gauge/indicator   | Brass     | 01   | No.  |
| 08      | Clean Agent (FE 36)        | HFC 236fa | 04   | kg   |