WARNING
All information described in this user manual should only be performed by authorized personnel.

WARNING
For the safe and correct operation of the device, the user manual must be read carefully and all procedures must be performed accordingly. The product must be installed in accordance with the relevant technical standards and regulations.

Description
This device is designed to automatically shut off gas flow under earthquake conditions in accordance with TS 12884 standard requirements. The device performs the desired shut-off when exposed to seismic vibrations within the acceleration ranges specified in the standard conditions. It is delivered to the user with factory settings configured in this manner. The settings should not be altered. It is not expected to operate at different values. After shutting down, the device does not reset automatically and does not allow gas flow. The pull handle must be retracted to reset the device and restore gas flow.

Areas of Use
The product is used in gas supply lines of systems that use flammable and combustible gases such as natural gas and LPG to automatically shut off gas flow during an earthquake. For the device to operate safely and correctly, it must be securely mounted to a rigid (fixed and sturdy) surface that can directly detect the building's seismic movements, in accordance with the installation instructions specified in this manual.

Technical Specifications

Working Pressure	501 mbar - 4 bar
Maximum Pressure Resistance	20 bar
Working Temperature	-23 °C , +60 °C
Gases That Can Be Used	Natural gas, LPG, methane, propane, air, etc. fluids in gaseous form.
Material	Aluminum body, brass and stainless steel internal components

Table 1 - Mechanical Earthquake Valve Technical Information

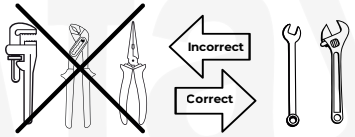
Torque Values
When devices are subjected to testing, they must be able to withstand at least the torque values specified in Table 2 without deformation that would prevent the device from functioning, and without cracking, breaking, or leaking when connected to the piping system.

This requirement does not apply to devices with flange connections.

Nominal outlet connection diameter mm	(in)	Lowest torque (N.m)
15	(½)	42
≥ 20	(¾)	63
25	(1")	85
32	(1 ¼)	99
40	(1 ½)	106
50	(2")	135
65	(2 ½)	148
80	(3")	148
100	(4")	170

Table 2 - Minimum torque values according to the device's rated output connection diameter

Proper Equipment Use
Do not hold the valve with pipe wrenches, channel locks, vise grips, or pliers. This will damage or scratch the valve body. Use only flat-faced wrenches, such as crescent wrenches or open-end wrenches, to install the valve. If the valve body is damaged due to incorrect installation, all warranty rights are void.



Example 1 - Correct and Incorrect Tool Usage Examples

Causes and Consequences of Malfunctions

Malfunctions can occur in three different ways. In all cases of malfunction, please contact our central service.

1. Potential malfunctions during transportation from the factory to the end user: Our devices are sold in cardboard boxes. Return any products not in the box to the seller. During transport and shipping, products should not be thrown, shaken, subjected to heavy loads, or left in wet areas. Check the device for faults before connecting it to the column line. Pull the mounting lever while holding it in the mounting position. Check if the device is installing. Check the device body and connections for damage. In case of malfunction, send the device to the central service center. Wait for the central service center to contact you with information. The service center will decide whether it is covered by warranty.

2. Malfunctions due to tampering with the device: If the device malfunctions as a result of tampering by curious individuals, it will be excluded from the warranty. Do not reconnect devices that have been disassembled. Since the devices are sealed with non-removable adhesive, you may have damaged the internal components.

3. Following the connection of the device to the gas line, malfunctions caused by external factors: Ensure that the installation directions are correct. In case of malfunction, you must notify your authorized plumber or gas distribution company; the end user should not interfere with the device. During installation, the mounting lever is attached to the shaft. Pull it by hand, wait 5 seconds while pulling, and release the mounting lever. If it does not lock, try locking it again. Screw the mounting lever button into the device from the reverse side. If mounting does not occur, the product is defective. If the column line is pressurized with gas and the device has shut down for any reason other than seismic activity, or if the mounting lever has closed, immediately notify the authorized gas distribution company. The device may have shut down due to an impact on the column line.

Gas Flow Direction

Figure 2 - Horizontal Mounting Direction

Figure 3 - Vertical Mounting Direction

WARNING
The flow direction arrow on the body must be followed in all installations.

Service and Spare Parts Stations
For all issues related to the product, you can contact our Central Service or our Factory for detailed technical information.

Title	Fay Mekanik Makine San. ve Tic. Ltd. Şti.
Service Location Address	Fetih Neighborhood, Düzgün Street No: 1/2 Interior Door Number: 1 Ataşehir / ISTANBUL 34704
Phone / Fax	0 (216) 660 0 777 / 0 (216) 660 0 772
E-mail	info@faymakine.com.tr
Web	www.faymakine.com

Table 3 - Service and Spare Parts Station Information

WARRANTY
CERTIFICATE

THE MANUFACTURER OR PRODUCTİON COMPANY ;

Title : **FAY MEKANİK MAKİNE SAN. VE TİC. LTD. ŞTİ.**
Address : Fetih Neighborhood, Düzgün Street No: 1/2
Interior Door Number: 1 Ataşehir / ISTANBUL 34704
Phone : 0 (216) 660 0 777
Fax : 0 (216) 660 0 772
E-mail : info@faymakine.com.tr
Authorized Signature :
Company Seal :

FAY MEKANİK MAKİNE
SAN. VE TİC. LTD. ŞTİ.
Fetih Mah. Düzgün Sok. No:1/2 İç Kapı No:1
34704 Ataşehir/İST.
Tel:0216 660 07 77 Fax:0216 660 07 72
Ümraniye V.D. 385 061 5801
Tic. Sicil No:878150

THE SELLER COMPANY ;

Title :
Address :
Phone :
Fax :
Invoice Date and Number :

GOODS ;

Type : **Mechanical Earthquake Valve**
Brand : **FAY**
Model : **FM**
Warranty Period : **2 YEARS**
Maximum Repair Time : **20 WORKING DAYS**
Label and Serial Number :
Date and Place of Delivery to the Consumer :

Warranty Terms and Conditions

The warranty period begins on the date of delivery of the goods and lasts for 2 years.

- All parts of the product are covered by our company's warranty.
- If the product malfunctions within the warranty period, the time spent on repair is added to the warranty period.
- The repair period for the goods shall not exceed 20 business days. This period shall commence from the date of notification of the defect in the goods to the service station or, if there is no service station, to the seller, dealer, agent, representative, manufacturer, or producer of the goods. The consumer may report the defect by telephone, fax, e-mail, registered letter with return receipt, or similar means. However, in the event of a dispute, the burden of proof lies with the consumer. If the defect in the goods is not remedied within 10 business days, the manufacturer-producer or importer must assign another product with similar characteristics to the consumer for use until the repair of the goods is completed.
- If the product malfunctions within the warranty period due to material or workmanship defects or installation errors, it will be repaired free of charge, including labor costs, replacement part costs, or any other fees.
- Despite the consumer exercising their right to repair, the product; Within one year from the date of delivery to the consumer, provided that it remains within the specified warranty period; malfunctioning at least four times or more than six times within the warranty period specified by the manufacturer and/or importer, in addition to these malfunctions continuously preventing the use of the goods, exceeding the maximum time required for repair, the company's service station, or if there is no service station, a report issued by the seller, dealer, agency representative, importer, or manufacturer-producer in that order, determining that the malfunction cannot be repaired, the consumer may request a free replacement of the goods, a refund, or a price reduction proportional to the defect.
- Defects arising from use contrary to the instructions in the product manual are not covered by the warranty.
- For any issues that may arise regarding the warranty certificate, you may contact the Ministry of Trade's Directorate General for Consumer Protection and Market Surveillance, or file complaints and appeals with consumer courts and consumer arbitration committees.

CENTRAL SERVICE STAMP

FAY MEKANİK MAKİNE
SAN. VE TİC. LTD. ŞTİ.
Fetih Mah. Düzgün Sok. No:1/2 İç Kapı No:1
34704 Ataşehir/İST.
Tel:0216 660 07 77 Fax:0216 660 07 72
Ümraniye V.D. 385 061 5801
Tic. Sicil No:878150

PRODUCTİON DATE:
COMMISSIONING DATE:
SERIAL NO:

Important Considerations and Warnings

- The device must be installed by a qualified installer.
- The device must be installed perfectly level.
- This device must be installed by a qualified installer in accordance with the manufacturer's installation instructions.
- A device that is not installed correctly may not operate as intended or may result in a gas shut-off that is not covered by the warranty.
- After the device shuts off the gas supply, only an authorized person should check for gas leaks and then restart the device.
- The operating pressure specified in the technical specifications section must not be exceeded, and the product must not be subjected to pressure exceeding the maximum operating pressure specified.
- No intervention should be made to the device, and repairs should not be performed by unauthorized persons.
- The device should not be tampered with, its covers should not be opened, and objects such as wires or water should not be inserted into its openings.
- The device should not be dropped.
- Care should be taken to prevent mud, stones, etc. from entering the device from the ground.
- Sealing elements such as flax or Teflon used in pipe valve connections should be prevented from entering the device during removal and installation, or sealing chemicals should be used. Otherwise, the device may not operate as intended.
- The device is not dangerous or harmful to human or environmental health.

Maintenance, Repair, and Periodic Inspection

- The device requires no maintenance. One operational check per year is recommended.
- Under no circumstances should any repairs or interventions be made to the device or the connected column line, regardless of the reason.
- Authorities must be notified in case of malfunction.
- All repairs must be performed by the Central Service. The malfunctioning device must be removed from its location by companies authorized by the Gas Distributor Company and sent to the Central Service.
- After ensuring that there is no pressurized gas in the column line, the device must be removed from the line by authorized personnel for repair or replacement.
- Ensure that the gas valves used before the device are closed; if not, close them.
- After repairing the device, be sure to use appropriate sealing elements before installing it on the column line.
- After the repair, be sure to check that the device connections are not leaking.
- If the device is reinstalled, it must be checked. If it is not level, notify an authorized plumber or authorized gas distribution company.

FM MODEL
USER MANUAL

PRODUCT TECHNICAL SPECIFICATIONS

Mechanical Earthquake Valve

BEFORE USE
Be sure to read the user manual included in your device's box and take all warnings into consideration. When opening the packaging, ensure that all parts of your device are present.

Device Reinstallation

WARNING

If the device does not return to its installed position or if the valve remains closed and does not reset, please contact **Fay Mekanik Makine** for assistance and troubleshooting techniques.

1

To reinstall the device, turn the pull handle counterclockwise and remove it from the body.

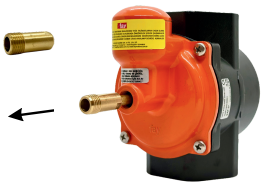
2

Turn the pull handle upside down and attach it by turning the shaft inside the body clockwise.

WARNING

To ensure that the valve is level (using a spirit level) and undamaged, it is recommended **that the valve be checked at least once a year**. If the valve is found to be out of level or damaged, the customer should call a qualified gas service technician for repair.

3



Pull the handle toward you to bring the device into the installed position. Wait a few seconds. The shaft should remain in this position.

4

Turn the pull handle counterclockwise to remove it from the shaft. Then, turn the pull handle upside down and turn it clockwise to reattach it to the body.

Device Operation Check

Technical personnel device operation control steps;

- The main gas shut-off valves entering the building are closed.
- The gas coming from the stove is turned off.

1

To reinstall the device, turn the pull handle counterclockwise and remove it from the body.

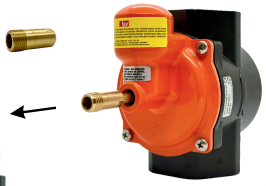
2

Turn the pull handle upside down and attach it by turning the shaft inside the body clockwise.

3

Check whether the device is working by moving the ball with the neodymium magnet. The shaft should move forward and a closing sound should be heard. In this case, the flow will be interrupted.

4



5

To reinstall the device, pull the handle towards yourself to set the device in the installed position.

Turn the pull handle counterclockwise to remove it from the shaft. Then, turn the pull handle upside down and turn it clockwise to reattach it to the body.

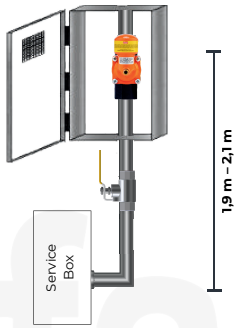
Assembly Instructions

WARNING 1

Before attempting to reset the valve, read and understand the following sections completely.

WARNING 2

This device must be installed by a qualified installer in accordance with the manufacturer's installation instructions. If not installed correctly, it may not function as intended or may result in gas shutoff outside of warranty coverage.



The completed assembly is as shown above.

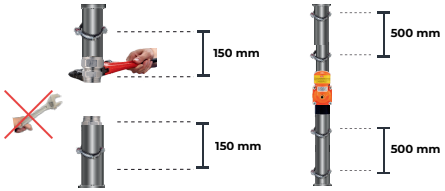
WARNING 3

The device must be installed outdoors at a height of 1.9 m – 2.1 m above ground level and connected vertically to the natural gas pipeline.

WARNING 4

After the device's gas supply is shut off, it should only be adjusted and put back into operation after an authorized person has determined that there is no gas leak.

1



First, install the valve on the pipe line. Secure the valve to the pipe by tightening the couplings, and install the clamps. **DO NOT USE a pipe wrench!** Install the clamps so that they are positioned 150 mm below and 150 mm above the valve body. Install the next clamp at 500 mm intervals. Once installation is complete, the gas line is ready for use.

2

Teflon tape, sealing compound, or flax should be used as sealing material for gear connections.

WARNING 5

Second clamps should be installed approximately 50 cm away from the existing clamps on the input and output sections of the device.

3

Complete the plumbing system with the **Fay Mekanik Earthquake Valve**. Pay attention to the flow arrow direction on the valve.

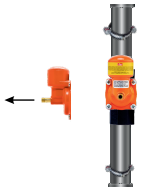
4

Check that the water level is centered to confirm that the valve is level.

WARNING 6

For fire safety during earthquakes, it is not sufficient to simply connect this device to the gas system. Care must be taken to securely install gas-using appliances to prevent them from tipping over during seismic activity. Where possible, the electrical supply should be cut off during seismic activity, and automatic fire suppression systems should be installed.

5



Install the Mechanical Earthquake Valve while the gas is still shut off. Do not open it against gas pressure.

6

Use a soapy solution to check for leaks in all connections.