



EKİN ENDÜSTRİYEL

Flow Control Unit
Installation and User Manual

TRUEVALVE

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**The first condition of innovation is to question.
And the first condition of sustainable innovation is to question
constantly.**

The journey of innovation has started with a question for us too: “How can we develop value-added technologies in Turkey?”. First turning point in this long journey was the birth of MIT (Made in Türkiye) brand. MIT made us the first plate heat exchanger producer of Turkey and it’s founding vision was not to become a local alternative, it was to build a high-quality brand that can compete on a global level.

While we are working towards this goal in the past 17 years, our products and processes deemed worthy for documentation by many national and international quality assessment institutions such as ISO, TSE, CE, GOST and many more. This was the natural outcome of our constant questioning of the status-quo and our desire to outperform ourselves.

New Generation Engineering

With our engineering approach that focuses on the process, not the product, we do not just specialize in a product, we consider the entire ecosystem of that product. Ergo, we produce all the other components of a system in addition to plate heat exchangers and we focus on the constant development of engineering staff required to provide an end-to-end application.

We provide a “solution” rather than a product with our business development, presales, sales and after sales services provided by our expert engineers.

In our 17th year, we continue to grow as a solution partner for projects that need high technology in more than 60 countries with our internationally approved high-quality plate heat exchangers; components such as accumulation tanks, boilers, industrial pumps and installation materials that completes these exchangers to form a system; and complementary services provided by our expert engineer staff.



HEAT TRANSFER PRODUCTS

- Gasketed Plate Heat Exchangers
- Brazed Heat Exchangers
- Shell & Tube Heat Exchangers
- Evaporators and Condensers
- DC Fan Driven Oil Coolers
- Heat Coils
- Serpentine / Radiators / Economizers

PRESSURE VESSELS

- Water Heater Tanks
- Water Storage Tanks
- Buffer Tanks
- Expansion Tanks
- Stainless Steel Tanks
- Balance Tanks / Dirt Separators / Air Separators / Air Tubes
- Steam Separators
- Pressured Air Tanks
- Neutralization Units

INDUSTRIAL AND FOOD GRADE SYSTEMS

- Heat Stations
- Industrial Process Systems
- Dosing Systems
- Substations
- Thermoregulators
- Pasteurizers
- CIP and Hygienic Process Systems
- Hygienic Storage and Process Tanks
- Homogenizers
- Turn-key Projects

FLUID TRANSFER PRODUCTS

- Lobe Pumps
- Hygienic Centrifugal Pumps
- Twin Screw Pumps
- Gear Pumps
- Magnetic Drive Pumps / Thermoplastic Pumps
- Dosing Pumps
- Air Operated Double Diaphragm Pumps (AODD)
- Drum Pumps
- Monopumps
- Centrifugal Blowers
- Roots Blowers
- Turbo Blowers

FLOW CONTROL UNITS

- Butterfly Valves
- Ball Valves
- Globe Valves
- Knife Gate Valves
- Actuators
- Check Valves and Strainers
- Thermoplastic Valves

ENERGY SYSTEMS

- Boilers
- Steam Generators
- Solar Collectors
- Chillers
- Cooling Towers

PRODUCT RANGE



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Important Notices

- If the valve is not installed, used and maintained as specified in the user manual. Product will be out of warranty.
- Have the connection and mechanical installation of the valve done by qualified companies according to the relevant product connection diagram specified in this manual.
- Please check sealing of all connections and installations.
- Make sure that the electrical connections of the electric actuators are made by qualified electricians.
- The valve is produced in accordance with its intended use. It cannot be used other than for this purpose. Otherwise, it will be out of warranty.
- Any repair, modification or revision of the valve without the approval of the manufacturer cannot be done. Otherwise, the product will be out of warranty.
- In all electrical connections grounding should be done by licensed electricians.

Assembly and Use

- Before installation, clean all kinds of foreign matter, sand, gravel, etc. in your installation. Otherwise, these foreign substances may damage the sealing elements.
- First, connect one side of the valve to the installation. Then, connect the other side to the installation without allowing tensile stress to occur.
- Be sure to put a sealing gasket between the valve flange and the installation flange.
- While installing the valve, turn it to the closed position and grasp it by the key blades.
- While tightening the flange bolts, tighten them with mutual and equal force.
- Take the valve out of its packaging when connecting it to the installation.
- In order to prevent the valves in the installation from being damaged by foreign substances in the fluid, put a strainer (filter) in the appropriate places of the installation.
- The fluid pressure must not exceed the nominal pressure indicated on the valve.
- When carrying the valve, never carry it by the opening-closing mechanism (arm, flywheel, actuator, etc.).
- Protect the valve against external forces (jerking, impact, etc.).
- When the valve is in the fully open or fully closed position, the valve should not be forced any further.
- It should be used in fluids suitable for valve body and internal material.

Maintenance and Cleaning

- Before the valve maintenance and cleaning, personal safety precautions should be taken.
- The cleaning liquid with which you will clean the valve should be selected in accordance with the valve material.
- Valve maintenance and repair operations should only be performed by experienced personnel.
- The flow in the line must be stopped when the valve is to be serviced or repaired. The valve must be empty.

- If the valve has an electric or pneumatic actuator, the energy connections of the actuator must be removed first.
- Electric actuators or electric valve equipment must not come into contact with wet surfaces.

Possible Problems and Things to Consider

Noise from Valve

The valve is used outside the design limits or there may be an incorrect mounting position.

Valve Doesn't Turn on and Turn off

If the valve is electrically or pneumatically actuated, check the adequacy of your air or electrical energy. A minimum of 4.5 bar air is required for pneumatic actuators. Foreign particles may be trapped inside the valve. The valve must be cleaned by backwashing or disassembling.

Valve Not Sealing

The valve may not be fully closed. The sealing gasket may be worn or damaged. Foreign particles may be trapped in the valve and may be preventing the closing of flow control equipment such as balls and flaps.

Valve Seals and Usage Areas

EPDM Gasket

- Alcohol
- Diluted Acids
- SuWater
- Ozone
- Ketones

NBR Gasket

- Petroleum Based Fuels
- Oils
- Vegetable Oils
- Silicone Oils
- Greases
- Ethylene Glycol
- Water

VITON Gasket

- Petroleum Products
- Diesel Biodiesel Fuels
- Silicone Oils
- Greases
- Ozone
- Air
- Temperatures up to 200 °C
- Diluted Acids
- Water

PTFE (Teflon) Gasket

- Alcohol
- Ozone
- Ketones
- Pure Non-Acid Chemicals
- Abrasive Fluids

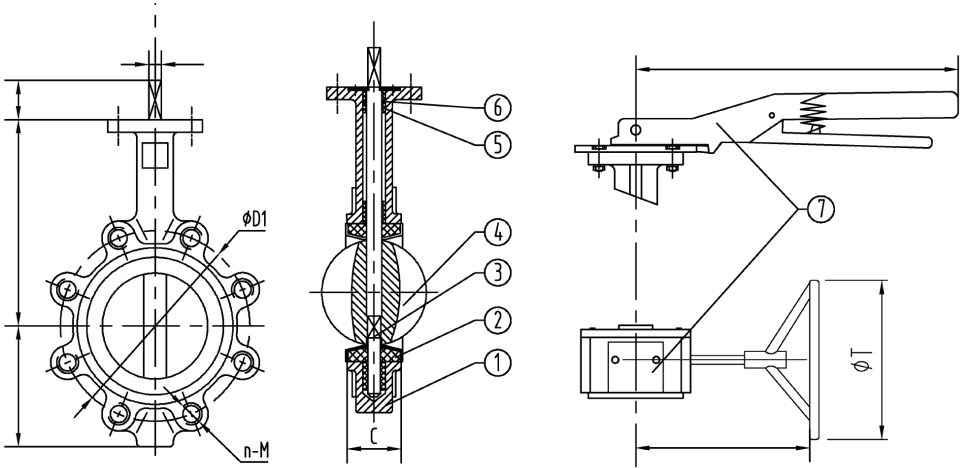
Warranty

- The warranty coverage starts from the date of delivery of the product, it is not related to the installation date of the product.
- If the product fails during the warranty period, the time spent in repair is added to the warranty period.
- Damages that may occur to the products during transportation and assembly are not covered by the warranty.
- Surface deterioration caused by the product being left in the environments where construction activities continue for a long time is not covered by the warranty.
- Defects caused by faulty assembly at the place of use by unauthorized persons are not covered by the warranty.
- Failures caused by construction residues as a result of assembling the products without cleaning the installation in new constructions are not covered by the warranty.
- Surface and internal structure deteriorations after cleaning with cleaning agents containing acid and abrasive powder or liquid are not covered by the warranty.
- Defects that occur in the product due to the effects of stone particles, mud, burrs, sand etc. coming from the installation or due to calcification are not covered by the warranty.
- In case of malfunction of the valve, please contact the seller. Fill in the Customer Return and Feedback Form to be sent by the seller and send the photograph showing the installation line with at least 1 valve and the mounting method to the seller.
- The technical service report and photographs of the faulty product are recorded on-site by the technical service personnel in order to pass on the quality records of the customer complaints.
- In the technical service report, the conformity of the assembly and installation of the product to the conditions specified in the user manual is evaluated.
- During on-site technical service, even if the location and shape of the error can be seen, the product can be called to our factory for production / user error detection.

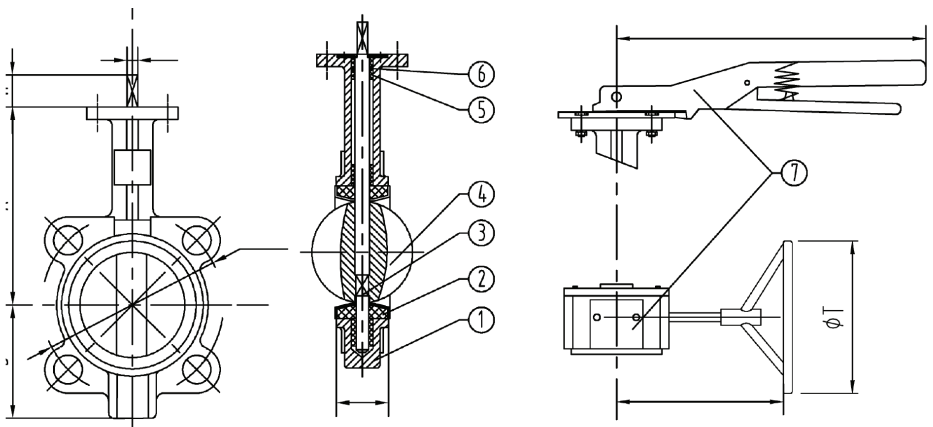
Valve Connection Types

There are different types of connections according to valve types. Butterfly valves are shown below as Lug type and Wafer type.

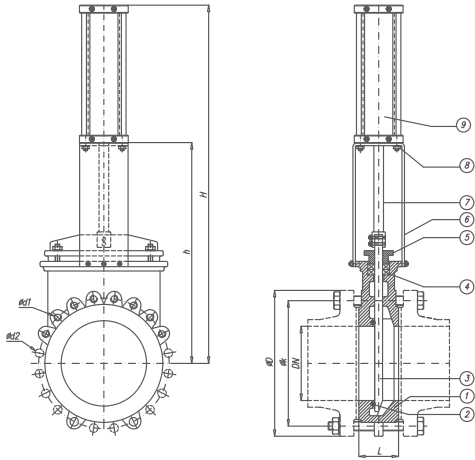
Lug Type Butterfly Valve Connection Drawing



Wafer Type Butterfly Valve Connection Drawing



One Side Sealed Knife Valve Connection Drawing



- Knife valves are connected as one-sided and double-sided sealed according to the body type.
- The point to be noted here is that in body designs with one-sided sealing, the fluid is mounted from the non-sealed part.
- The fluid exerts pressure on the blade and ensures that it is fully seated on the gasket part.
- There is no such distinction in double-sided sealed valves.
- It can be connected to the installation from both sides.

Notes

Dotted lines for writing notes.



EKIN ENDUSTRIYEL

CERTIFICATE OF WARRANTY



The Document's Confirmation Date and Number:

The usage of this document has been authorized by T. C. Sanayi Bakanlığı İl Müdürlüğü in accordance with the Law No: 4077 on the Protection of Consumers and the Communiqué on the Implementation of the Guarantee Certificate put into effect based on this Law.

WARRANTY CONDITIONS

1. Warranty period starts from the delivery date of the goods.
2. In case of malfunction of the products within the warranty period, the time spent in the repair is added to the warranty period. The repair period of the goods is maximum 30 working days. This period starts from the date of notification to the service station of the defect goods. In the absence of service station, this period starts from the date of notification to the seller, dealer, agent, representative, importer or manufacturer of the goods.
3. In case of malfunction of the goods within the warranty period due to material, workmanship or assembly defects, the goods will be repaired at no cost and no additional cost will be asked from buyer under the name of changed part price or any other name.
4. Defects caused by the use of the product contrary to the items in the user manual are out of the warranty.
5. For the problems that may arise regarding the Warranty Certificate can be applied to the Sanayi ve Ticaret Bakanlığı Tüketicihin ve Rekabetin Korunması Genel Müdürlüğü.
6. The manufacturer may request that the product be sent to its own production facility at its own discretion. The shipping cost to be spent by the customer belongs to the manufacturer; if it is evaluated within the scope of warranty as a result of the examination made on the product. If the defect is not evaluated under the warranty, all costs incurred will be invoiced to the customer.
7. The manufacturer is not responsible for any damages and losses that may occur in the cargo or warehouse during the shipment of the product.
8. The manufacturer accepts no liability for the damage caused by the following reasons:
 - Failure to comply with temperature, pressure or other conditions specified in the technical specifications.
 - Incorrect applications and normal abrasion conditions.
 - Damages that may occur from sudden opening and closing of the fluid valves.
 - Damages caused by the usage of non-original spare parts.
 - Damages that may occur during shipping.
 - Damages that may arise from corrosion.
 - Blockages caused by the fluid passed through inside the product.
 - Blockages that may arise from condensate discharge in products which are used in steam applications.
 - Damages that may occur by the blockages caused by the solid materials which can block the products.
 - Damages that may occur as a result of incorrect interventions by the un-authorized services.
 - Damages that may be caused by the lack of fixtures or not working properly.
 - Accidents and problems that may occur in the system if the safety fixtures (safety valve, thermostat, pressure sensors, temperature sensors etc.) are not used are not considered under warranty. The manufacturer is not responsible for any of the pecuniary and non-pecuniary damages that may occur.
9. Manufacturer is not responsible for secondary damages, loss of production and accidents whether it is under warranty or not.
10. All of the above items have been specified in our offer and order confirmations and you have been informed that they supersede the contract. Commissioning of the product means acceptance of the contract.

For the product that was sold to LTD. ŞTİ. / A. Ş / Legal Entity on/20... with stated model, brand and serial number, all kinds of manufacturing and material defects are covered by the warranty of our company for 2 (two) years.

SELLER

DEALER

END USER

Brand :

Product Type :

Product Code :

Serial No. :

Product No. :

Please keep this certificate!

NOTE: User mistakes are not covered by warranty.
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Professional System Solution Center

From our MIT professional system solution center, you can get help with problems with your pumps, heat exchangers and your system. Our solution center consisting of our expert engineers will be happy to help you.

- Domestic hot water installations.
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- Industrial cooling and heating systems.
- Oil cooling systems.
- Energy recovery systems.
- Pool heating systems.
- Steam installations.



It is vital for your system to be designed and implemented correctly in the first installation in order to be able to operate at the desired capacity, smoothness and long life. For this reason, you can get first-hand the technical support you need during the installation phase of your system and the problems that may arise in the business; You can reach us **24 hours +90 (216) 232 24 12 in 7 days.**

7/24
SERVICE
+90 850 811 04 18

We would like to reiterate that we will be happy to share our knowledge accumulated over many years with our valued customers in order for your system to work correctly and performance.

Ekin will continue to be the best solution partner for you in all applications with all kinds of heating and cooling applications.



Producer; reserves the right to change the product features, technical dimensions and information and installation diagrams specified in this catalog without notice. No specified information can be copied and used without the permission of the manufacturer. In no way can the manufacturer be held responsible by giving examples of technical information and diagrams. In case of need, we request you to request a special technical drawing for your project for exact dimensions.

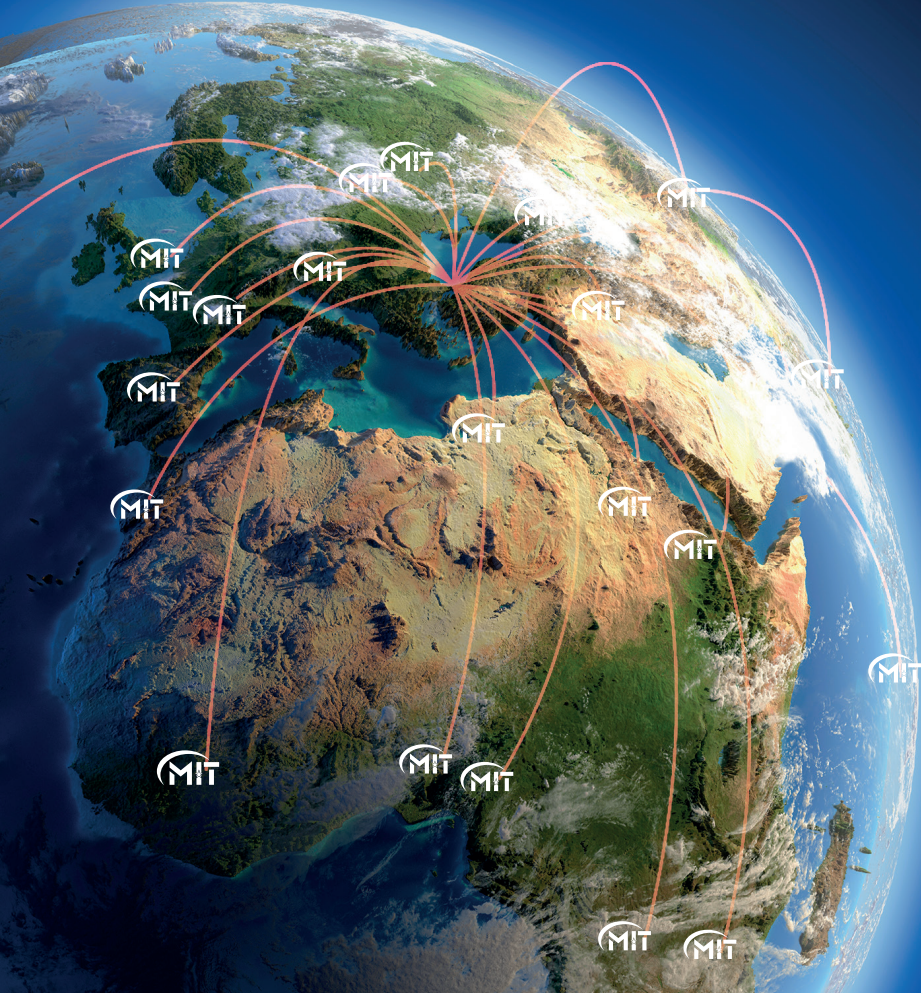


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