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VALVE CATALOGUE

"WE ARE WİTH YOU
WİTH OUR QUALİTY"

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TYPES OF VALVES
PROVİDED BY OUR COMPANY

A valve is a device that regulates, controls, or directs the flow of a fluid by opening, closing, or partially obstructing fluid flow.

In this article mentioned 19 types of valves

1. Globe valve,
2. Gate valve,
3. Ball valve,
4. Butterfly valve,
5. Diaphragm valve,
6. Plug valve,
7. Needle valve,
8. Angle valve,
9. Pinch valve,
10. Slide valve,
11. Flush bottom valve,
12. Solenoid valve,
13. Control Valve,
14. Flow regulating valve,
15. Back pressure , regulating valve
16. Y-type valve,
17. Knife gate valve,
18. Check valve,

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GLOBE VALVE

It operates by reciprocating action of disc or plug. The disc or plug moves to or away from the seat thereby stopping the fluid flow or allowing the fluid to flow. The disc or plug seats over the valve seat. The valve seat can be removable. Pressure drop in the globe valve is high.

GATE VALVE

As one of the most common valve types, gate valves use linear motion to start and stop the flow. These are typically not used for flow regulation. Instead, they used in the fully open or closed positions.

BALL VALVE

Predominantly equipped with quick-acting 90-degree turn handles, these valves use a ball to control flow to provide easy on-off control. They are widely used in chemical process industries. Generally accepted by operators to be faster and easier to operate than gate valves. It can be available in size from 6mm to as large as 900mm. It can be used for pressures up to 500 kg/cm and temperature up to 300°C.

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BUTTERFLY VALVE

Using a compact design, the butterfly valve is a quick-acting rotary motion valve ideal for tight spaces thanks to its wafer type design. Butterfly valve bodies are offered in many different configurations. Its operation can be manual, power, or automatic Wafer type butterfly valve is shown. Butterfly value can be used for vacuum operations or pressures up to 80 kg/cm2. It is available in size ranging from 50mm to as large as 900 mm.

DİAPHRAGM VALVE

Main parts of a diaphragm valve are, body, bonnet and a flexible diaphragm. Diaphragm is made either from rubber, neoprene or buna. It is available in size 3 mm to as large as 600 mm. It can be used up to 20 kg/cm2 pressure and 2200 C temperature.

PLUG VALVE

Plug valve is used for on-off service. It is the oldest type of valve. Plug valve can be made to have one or more openings to change the direction of flow. It can be lubricated or non-lubricated type.

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NEEDLE VALVE

Typically used in small diameter piping systems when fine, accurate flow control is needed, Needle valves get their name from the point on a conical disc used within. The valve size varies from 3mm to 25mm and can be used in the temperature and pressure range up to 260 C and 650 kg/cm respectively.

ANGLE VALVE

It is similar to globe valve. In angle valve the inlet and outlet ends are at 90 degree to each other.
The axis of the stem is in line with one of the ends. Angle valve gives lower pressure drop and less pipe fittings in the piping system. Angle valves can be used for corrosive fluids. It can have a single body or split body.

PİNCH VALVE

Often used for handling solid materials, slurries and liquids with suspended solids, pinch valves use a linear motion. It can be used for on-off and throttling operations. The valve has a sleeve which is replaceable. It has low maintenance cost, low pressure drop and low initial cost. Its operation mechanism is completely isolated from fluid. This eliminates problems of corrosion and contamination.

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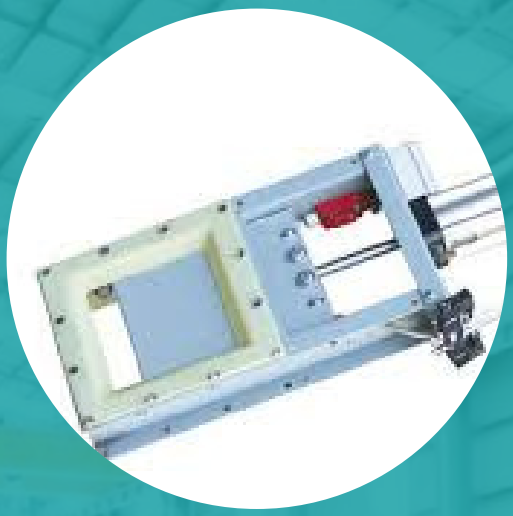
SLİDE VALVE

It is used for controlling low pressure flow of gases, liquids, suspensions and fluidized solids. It has two parallel body seats between which the disc slides. The disc acts as a gate. Pressure chop offered by slide valve is very low. It is available in size ranging from 50 mm to as large as 1500 mm. It can be used for pressures Up to 25 kg/cm2 and temperature up to 650°C.



FLUSH BOTTOM VALVE

It has wide applications in process industries for discharging materials from tanks. It is available in size ranging from 25 mm to 150 mm. It can be used for discharging dry solid material from bins.

SOLENOİD VALVE

It is a control valve. Solenoid is applied to sliding stem, on-off globe valves. It is used for emergency shut off service requirements. It is available in size ranging from 1 mm to 100 mm. It can be used for absolute vacuum to very high pressures in the range of 650 kg/cm2 and temperatures as low as - 250°C to 800°C.

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CONTROL VALVE

It is necessary for automatic process control system. It can be used either for controlling level, flow rate, temperature, pressure etc. The selection of control valve involves its operation mechanism, process conditions as well as requirements. It can be manual or power operated.

FLOW REGULATİNG VALVE

IIn a flow regulating valve a constant flow rate is maintained irrespective of any changes in the line pressure. As the pressure changes on either side of the stream, the diaphragm actuates a spring loaded valve. The spring loaded valve opens or closes maintains the flow at constant rate.

BACK PRESSURE REGULATİNG VALVE

It has a spring loaded disk or piston. The disc or piston lifts up and opens the valve whenever the pressure in the system exceeds the pressure exerted by the spring. A diaphragm transmits the pressure to the disc or piston. It has a design similar to relief valve.

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Y-TYPE VALVE

In this valve the orifice is approximately at 42 to the path of flow. Y-type valve offers low pressure drop and good throttling condition.

KNİFE GATE VALVE

Typically used for controlling flow of media containing solids, the knife gate valve features a thin gate controlled through linear action which can cut through materials and create a seal.
While not suited for high-pressure implementations, these valves are ideal for use with grease, oils, paper pulp, slurry, wastewater and other media which might obstruct the operation of other valve types.

CHECK VALVE

Used to prevent backflow, these valves are typically self-activated allowing the valve automatically opens when media passes through the valve in the intended direction and close should flow reverse.

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Thank you, and we look forward to working with you.

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WHAT WE DO?

IMEC" LLC engineering company i s a dynamic, innovative startup company which has been formed i n 2022. The mission of company involves i n advanced engineering solutions, consulting, commercial services in Mining, Agriculture, Oil & Gas industry which i s expected to grow and develop within the next ten years and in other industrial fields; Supply of equipment, its startup, periodic planned and unplanned maintenance works; designing pipeline projects and pipeline construction works.

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