

MESSEN



PRODUCT CATALOGUE





About **MESSEN**

MESSEN in German means “Measure”.

And the name is our commitment to our customers that; “We are Together in Every Measure”.

Messen Controls - registered brand in UAE with manufacturing facilities in UAE and India. We specialize in design of valves such as Ball, Gate, Globe, Check, Plug, Butterfly and Controls Valves. We provide extensive support and solutions on pneumatic and electrical actuator and controls systems. Our product comply with ANSI, DIN standard widely used in Water, Power, Chemical, Petrochemical and Oil & Gas Industries.

We are a reliable brand with high quality standards, providing customized solutions that are cost effective and reliable.



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Our Mission

"Together In Every Measure" is our tagline and Messen's philosophy is based on togetherness. We strongly believe in achieving highest quality by listening and working together with our customers and understanding their challenges and needs, to provide most efficient and standardized solutions. Our professional team and advanced manufacturing and machine tool setup, combined with the higher quality standards and processes, is our key to success.

Messen supports environmental protection through the reduction of the environmental impact, energy consumption and wastage. Messen also focuses on protecting the health and safety of employees and all those using Messen's products through a constant analysis and reduction of risks.



Our Team

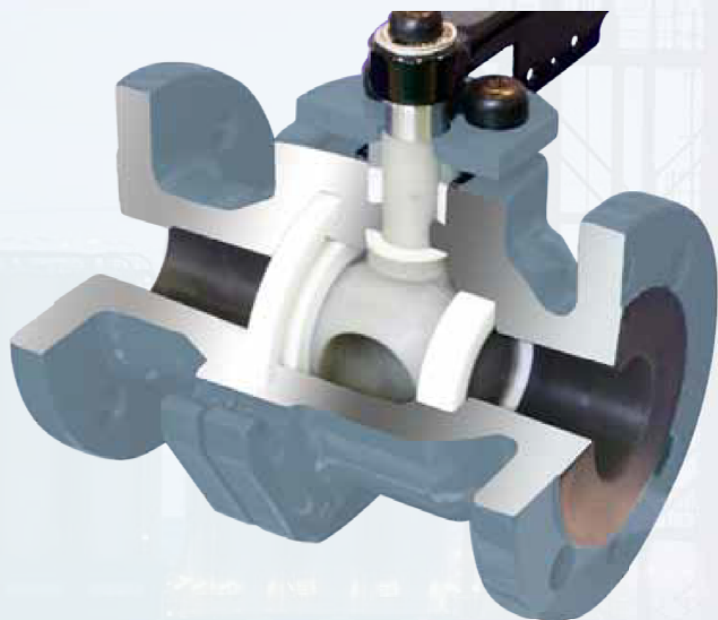
We are a highly experienced team and hence we are responsible.

We are hardcore believers of technology, process, and advanced tools and hence we are agile.

We believe in collaboration and hence we are team players.

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Ball Valves



A Ball valve is a quarter turn flow control device mostly used in ON/OFF applications, While the hole of the ball is in line with the flow inlet, it opens and closes when its ball hole is turned 90°, perpendicular of the valve body.

Ball Valve - Floating Design

The main feature of a floating ball valve is that there is no structure in the ball to support the valve. Therefore, it stays suspended in the fluid which forces the ball displaced tightly on to the sealing.

Major Advantages

- Easy maintenance
- Carefully machined sealing surfaces
- Longer operating life
- Lower maintenance costs



TECHNICAL DETAILS
Size Range: DN 15-200, NPS 1/2" – 8"
Pressure: PN 16-40, CL 150/300
End connections: BSPP, BSPT, NPT Welded: Socket and butt weld Flanged
Temperature: -28C to +160C
Design Standard: API 609, ASME B16.10
Testing Standard: API 598

MATERIAL
Body: Bronze, Carbon Steel, Stainless Steel
Ball: Bronze, Stainless Steel, Monel
Stem: Stainless Steel, Monel
Seat: Viton, PTFE
Handle Lever: MS/SS Fabricated

ADDITIONAL FEATURES
Valves can be supplied with Pneumatic, Electric Actuator or Gears
Torque Details on request
Other Size, rating , Standard & materials not mentioned above are available on request

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Ball Valves

Ball Valve – Trunnion Design

Within a trunnion ball valve, the ball is guided by the bottom stem / pin or plate, and the valve shaft helps to protect the displacement of the ball by the fluid pressure. So the trunnion ball valve needs only low operating torque compared to the floating ball valve. Trunnion design is available with two-piece body and three-piece body.

Major Advantages

- Easy maintenance
- Carefully machined sealing surfaces
- Longer operating life
- Lower maintenance costs



TECHNICAL DETAILS

Type: Trunnion (2- & 3-Piece body Designs)

Size Range: DN 50-400 , NPS 2" to 16"

Pressure: PN 20-100 , CL 150-600

End connections: RF / RTJ / BW

Temperature: -28C to +160C

Design Standard: API 6D

Testing Standard: API 6D, API 598

MATERIAL

Body Carbon Steel, Stainless Steel

Ball: Stainless Steel, Duplex Steel, Carbon Steel + ENP

Stem: Stainless Steel

Seat: Soft / Metal

ADDITIONAL FEATURES

Valves can be supplied with Pneumatic, Electric Actuator or Gears

Special Metal alloys on request. Torque Details on request

Other Size, rating, Standard & materials not mentioned above are available on request

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Gate Valves



A gate valve is an isolation valve and the functions are defined for ON/OFF application. It has a linear motion in which the gate moves up and down to open and close the valve.

Gate Valves

The Gate valves are divided into two main types:

Parallel and Wedge-shaped.

The parallel gate valves use a flat gate between two parallel seats, and for Wedge gate valve the gate is wedge-shaped.

Major Advantages

- Easy maintenance
- Carefully machined sealing surfaces
- Longer operating life
- Lower maintenance costs
- Improved gland packing arrangement

TECHNICAL DETAILS
Type: Bolted Bonnet, OS &Y, RISING STEM
Size: Range DN 50-600 , NPS 2" to 24"
Pressure: PN 20-200 , CL150-600
End connections: RF / BW
Design Standard: API 600, API 6D
Testing Standard: API 598
Operator: Handwheel, Gear, Pneumatic, Electric Actuator

MATERIAL
Body: Ductile Iron, Carbon Steel, Stainless Steel
Trim: Trim 1, 5, 8,12, 16, SS304, SS316

ADDITIONAL FEATURES
Other Size, rating , materials not mentioned above are available on request

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Globe Valves

Globe valves can be used for regulating flow or pressures and complete shutoff application.

Globe Valve – Design

It consists of a movable plug or disc element, with a stationary ring seat in a globe body. The valve opens when the plug moves upwards, perpendicular to the seat, therefore, it can be used for throttling applications. The Globe valve has a high-pressure drop, compared to the gate valve.

Major Advantages

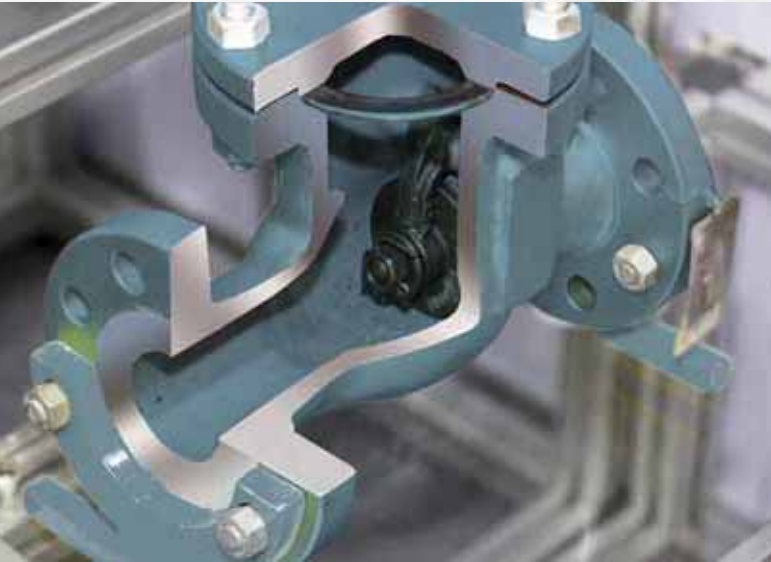
- Easy maintenance
- Carefully machined sealing surfaces
- Longer operating life
- Lower maintenance costs
- Improved gland packing arrangement



TECHNICAL DETAILS	MATERIAL
Type: Bolted Bonnet, OS &Y, RISING STEM	Body: Ductile Iron, Carbon Steel, Stainless Steel
Size: Range DN 50-400 , NPS 2" to 16"	Trim: Trim 1, 5, 8,12, 16, SS304, SS316
Pressure: PN 20-200, CL150/300/600	
End connections: RF / RTJ / BW	
Design Standard: API 600, API 6D	
Testing Standard: API 598	
Operator: Handwheel, Gear, Pneumatic, Electric Actuator	
ADDITIONAL FEATURES	
Other Size, rating , materials not mentioned above are available on request	

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Check Valves



Check valves are generally installed in pipelines to prevent backflow. A check valve is a one-way valve, in which the flow runs freely. But, if the flow turns, the valve will close and thus protects the piping and other instruments in the control loop.

Swing Check Valve

The swing check valve consists of a valve body, seat, and disc linked to the axis. Upon encountering a specified flow rate thus achieving inlet pressure enough to push the disc to the horizontal position, enabling forward flow. Disc returns to the valve seat when the flow and the pressure drops to prevent backflow.

Dual Plate Check Valve

The Dual Plate Check Valve is equipped with two-spring-loaded plates hinged on a central shaft. When the flow rate decreases below the spring pressure, the plate closes thus preventing the back flow. This design offers twin advantages of reducing Water Hammer effect and non-Slam effect.



TECHNICAL DETAILS

Size: Range DN 50-600 , NPS 2" to 24"

Pressure: PN 20-100 , CL 150-600

End connections: RF / BW

Design Standard: BS1868

Testing Standard: API 598

MATERIAL

Body: Ductile Iron, Carbon Steel, Stainless Steel

Trim: Trim 1, 5, 8,12, 16, SS304, SS316

ADDITIONAL FEATURES

Other Size, rating , materials not mentioned above are available on request

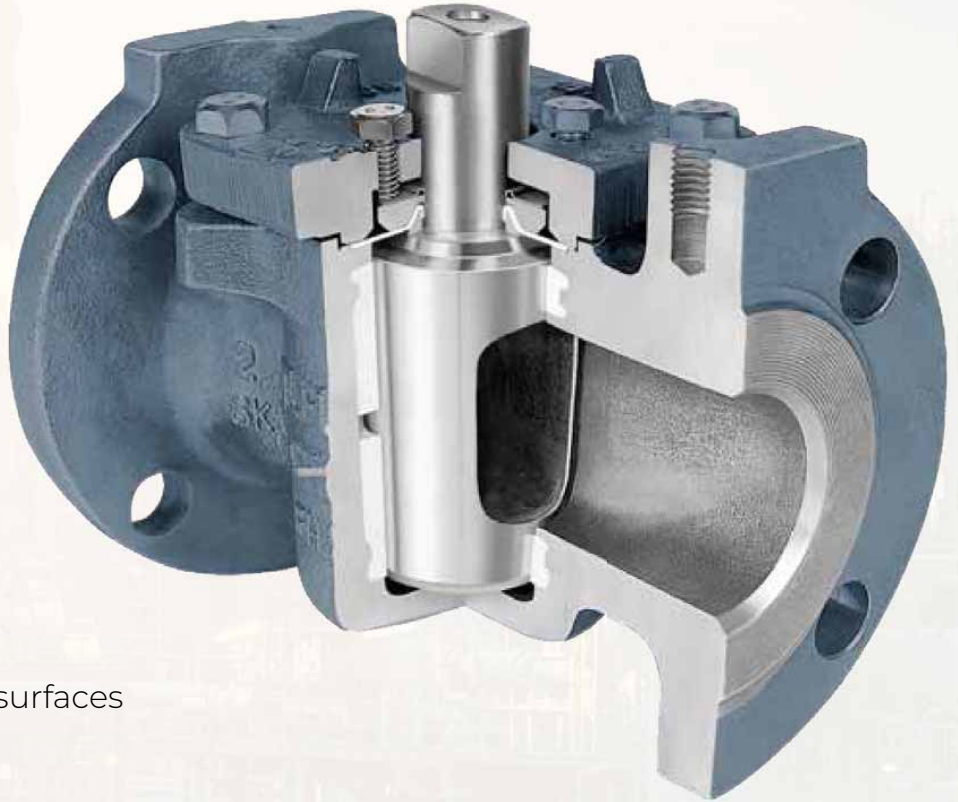
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Plug Valves

Plug valves are quarter-turn motion with cylindrical or conical shaped plug.

Plug Valve – Design

Plug valves are used for ON/OFF as well as moderate throttling services, used for high temperature, fluid with solid particles.



Major Advantages

- Easy maintenance
- Carefully machined sealing surfaces
- Longer operating life
- Lower maintenance costs
- Improved gland packing arrangement

TECHNICAL DETAILS

Type: PTFE Sleeved / Jacketed / Lined
Size Range: DN 15-300 , NPS 1/2" -12"
Pressure: PN 20-50 , CL 150-300
Temperature: -28C to +160C
Design Standard: API 599, ASME B16.10, ASME B 16.5
Testing Standard: API 598

MATERIAL

Body: Hastelloy, Monel, Super Duplex, Alloy Steel, Stainless Steel, Carbon Steel
Sleeve: PTFE, Glass PTFE, Carbon PTFE, Graphite PTFE
Operator: Lever, Gear, Actuator

ADDITIONAL FEATURES

Other Size, rating , Standard & materials not mentioned above are available on request

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Butterfly Valves



Butterfly valves are used in ON/OFF and controlling applications. The pressure loss through a butterfly valve is very less when compared with the gate and globe valves.

Butterfly Valves

The closing mechanism is a disk that rotates to the seat while closing.

Types

Butterfly valves are often distinguished by the three main types:

- Zero Offset Butterfly Valves
- Double Offset Butterfly Valves
- Triple offset butterfly valves

Major Advantages

- Easy maintenance
- Carefully machined sealing surfaces
- Longer operating life
- Lower maintenance costs
- Improved gland packing arrangement

TECHNICAL DETAILS

Type: Wafer / Lugged / Double Flanged

Size Range: DN 40-600 , NPS 1-1/2" to 24"

Pressure: PN10-100 , CL 150-600

Temperature: -28C to +160C

Design Standard: API 609 Category A/BS E 558 -1
Series 20/ISO 5752 Series 20/ MSS SP 67 / ASME B16.10

MATERIAL

Body: Carbon Steel, Stainless Steel

Stem: Stainless Steel

Seat: Soft / Metal

TESTING STANDARD

Control applications: According to ANSI FCI 70-2/
EN 60534-4

Open/close applications: API 598, EN 12266

ADDITIONAL FEATURES

Valves can be supplied with Pneumatic, Electric Actuator or Gears

Special Metal alloys on request. Torque Details on request

Other Size, rating , Standard & materials not mentioned above are available on request

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Pneumatic Actuator



Pneumatic Actuator – Rack & Pinion

Rack and pinion actuators are mechanical devices, used to open and close valves / dampers, usually for industrial applications. “Rack and pinion” is a generic term for a pair of gears which convert linear motion into rotational motion.

Major Advantages

Easy maintenance

Longer operating life

Carefully machined sealing surfaces

Lower maintenance costs

TECHNICAL DETAILS

Type: Rack & Pinion

Operating Pressure: 2 to 10 Bar

Rotation: 0 to 90 Degree + 3

Mounting Base: ISO 5211

Body Material: Aluminium

External Protection: Anodizing

OPTIONAL FEATURES

Rotation 0 to 120 / 180 / 0 to 180 Degree 3-stage

Body Material SS 304 / SS 316 / Carbon Steel

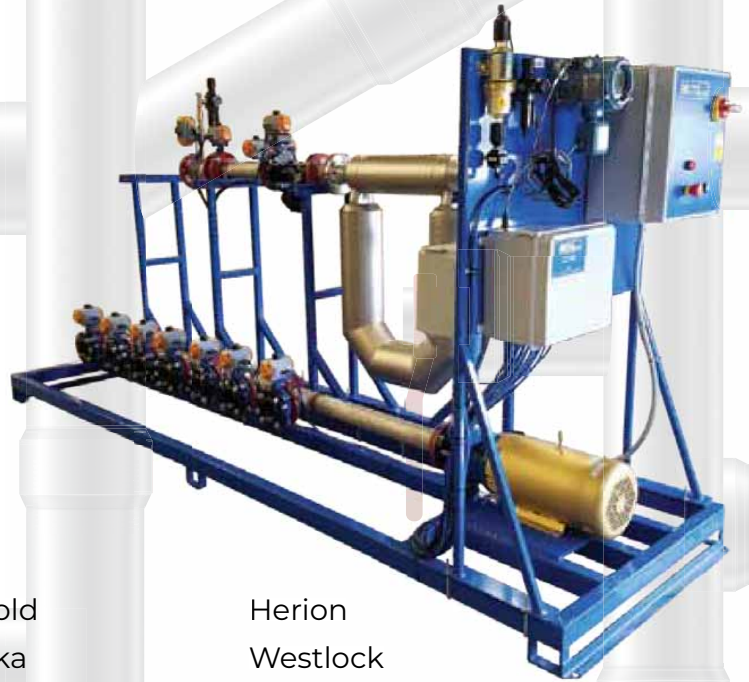
External Protection Teflon coating

Skid & Automation

Messen is able to provide customized actuated ball valves starting based on the customer requirement using the most suitable components including rack & pinion actuators, scotch & yoke actuators, compact actuators, SOV, AFR, POV, QQEV, positioner. The final control system is built into a control panel designed and manufactured completely by Messen.

Brands we work with:

Asc	YTC	Bifold	Herion
Samson	FenEx	Wika	Westlock
Fisher	Norgren	Parker	Hawke
Versa	Maxseal	Swagelok	Metso
Topworx	Rotork Soldo	ABB	Midland



Final Automated Unit

The final automated unit is the integration between the ball valve, the actuator and all the accessories related to its command and diagnostics. This assembly is seen from the plant control system as a remote unit with inputs and outputs and it is one of most important element for the safety of the people, environment and plant.

Assembly

Unit control panel and all other accessories are assembled in Messen factory by qualified team.

Testing

All Automated valves are tested in Messen according to internal quality procedures and guaranteed customer specifications.

Safety

ESDV, BDV, SDV, XV - Messen ball valves are certified up to SIL 3 based on different system configuration.



Services

Messen offers a variety of services to our global customer base that will enhance the experience of purchasing valves from Messen and add value to your investment from pre-sales consultancy to continuous aftersales service.



Onsite & Offsite service

We offer service and maintenance of various types of valves such as Control, Butterfly, Ball, Gate Globe Check Valves and Electrical / Pneumatic Actuators.

Technical Support

Messen Service ensures onsite support within 72 hours anywhere in the world and at any stage of the project, relying on a large team of experienced engineers.

Preventive Maintenance

Messen aims to provide preventive maintenance services, to ensure valve performance, which leads to better quality products from the process and reduce the breakdown time.

Training Services

Our close collaboration with customers leads to the development of a training plan for the staff responsible for the construction/installation, operation and maintenance of the plant.

Customized Services

At Messen, we offer ad-hoc services to customers such as construction and commissioning services, maintenance services, training services, etc., always adapting to the needs of our customers.

Spare Parts

Messen along with best quality of service, offers replacement services for valve components, SPIR/ Interchangeability list preparation, to reduce the inventory of spares in the plant.

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