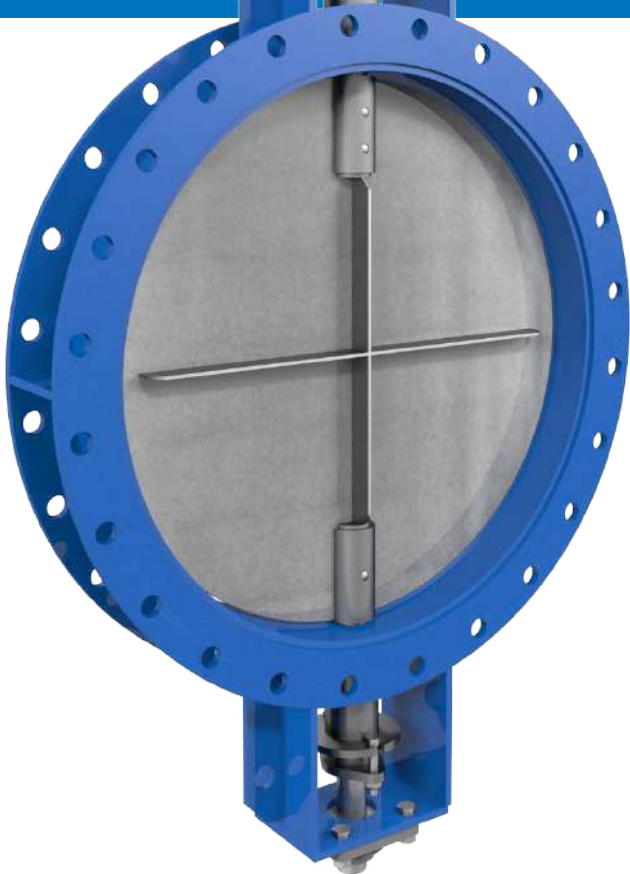




CMO VALVES

manufacturing the valve you need

**DAMPER VALVES
FOR
AIR & GASES TREATMENT**



THE COMPANY

CMO is a company that designs, manufactures and markets standard, and specialised valves. Its comprehensive range of manufacturing allows one to cover many industrial applications and the ability to control all kinds of fluid.

Founded in February 1993, with a staff having **more than 40 years experience** in the design and manufacture of valves. This experience, satisfaction and quality of work is what has assisted the company in evolving into what it is today, continually developing new products to meet the demands of industry and our customer's needs. Today, CMO is one of the largest manufacturers of valves in both domestic and international markets, with young and highly qualified staff continually willing to give the best service and attention to its customers.

QUALITY MANAGEMENT CERTIFIED

CMO Valves has always perceived and developed the concept of quality as one of the main foundations of your business and a key success factor, directed towards continuous process improvement in order to meet the needs and expectations of customers while maximum satisfaction is guaranteed.

Responsive to market demands, characterized by high specialization for Knife Gate Valves, and operating in an increasingly competitive environment, CMO Valves establishes a quality control system in 1998, the year of their first certification EN ISO 9001:2008.



CMO FACILITIES ARE DIVIDED INTO FIVE SECTIONS:

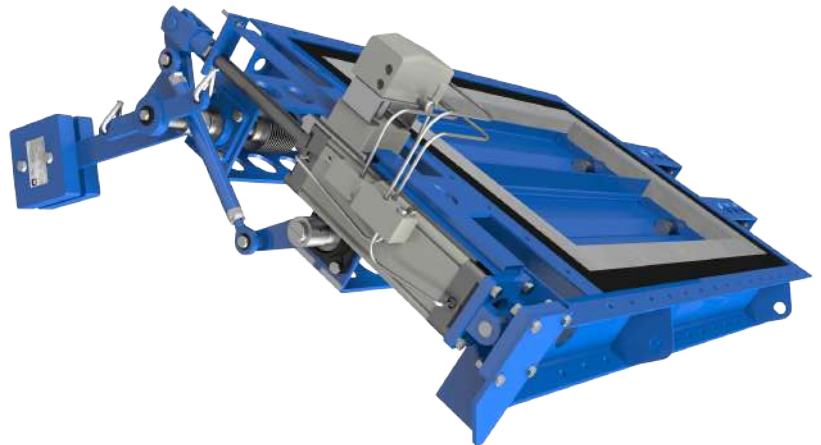
Offices / 540 m²

Production / 1000 m² (Tolosa) + 7000 m² (Altzo)

Testing / 400 m²

Deliveries / 525 m²

Quality Control / 300 m²



ISO 9001
EAC
AWWA STANDARDS

ASME STANDARDS
EC PED DIRECTIVE
ALL INTERNATIONAL STANDARDS



GR - series

PRODUCT DESCRIPTION

The Round Damper guillotine type GR manufactured by CMO is especially useful as an element of isolation to allow inspections, maintenance and repairs on the pipes. The basic mechanical elements that make up the guillotine type of damper GR, is a rack or foreign body that contains a piece that moves inside lengthwise, a sealing peripheral to prevent leakage of gas in all phases of the movement of the knife of gate, necessary supports and an actuator.

GENERAL APPLICATIONS:

Pulp and paper, mining, sewage applications, chemical plants, food and beverage and bulk conveying.

WORKING (ΔP):

DN50 → DN150:	10 kg/cm ²
DN200:	8 kg/cm ²
DN250 → DN300:	6 kg/cm ²
DN350 → DN400:	5 kg/cm ²
DN450 → DN600:	3 kg/cm ²
DN700 → DN1400:	2 kg/cm ²

TECHNICAL DATA FOR GR-GC SERIES

Standard manufacturing sizes:

From DN50 up to DN3000 (bigger sizes under request) GR Series 50x50 up to 3000x3000 (bigger sizes under request) GC Series. Also rectangular designs available.

Working pressures:

From DN 50 to DN 2000: 0,5 (kg/cm²)

Higher pressures available under request

Flange connection drillings:

The standard flange connection is according to CMO Valves design but any flange

design and drill can be done.

Applied Directives:

Directive (PED: ART.3/ CAT1),

Directive (ATEX: Cat. 3 / Zones 2 and 22 GD)

Tightness

From 98,5% to 99,5% Also available under request 100% tightness with double gate and air flushing system.



GC - series

PRODUCT DESCRIPTION

Square or Rectangular Damper guillotine type GR manufactured by CMO is especially useful as an element of isolation to allow inspections, maintenance and repairs on the pipes.

The basic mechanical elements that make up the guillotine type of damper GC, is a rack or foreign body that contains a piece that moves inside lengthwise, a sealing peripheral to prevent leakage of gas in all phases of the movement of the knife of gate, necessary supports and an actuator.

GENERAL APPLICATIONS:

This damper knife gate valve is appropriate for a wide range of air & gases application signed for a wide range of applications such us:

Pulp and paper, mining, sewage applications, chemical plants, food and beverage and bulk conveying.

ACCESSORIES FOR GR-GC SERIES

Mirror Polished Gate, Stellite gate, Scraper in the packing, Air injection in the packing gland, Flushing holes in body Mechanical Limit Switches, Inductive Switches and Positioners
Solenoid valves, Connection electrical boxes, electrical wiring and pneumatic piping, Stroke limiting mechanical stops Mechanical locking device

WORKING (ΔP):

DN50 → DN150:	10 kg/cm ²
DN200:	8 kg/cm ²
DN250 → DN300:	6 kg/cm ²
DN350 → DN400:	5 kg/cm ²
DN450 → DN600:	3 kg/cm ²
DN700 → DN1400:	2 kg/cm ²

MD - series

PRODUCT DESCRIPTION

Flanged or wafer butterfly damper valve. Cast or welded body and disc depending the diameter of the valve. Manufactured with different kinds of tightness depending the customer requirements (100% tight, 99,5% tight o 98,5% tight). Fabrication materials: S275JR carbon steel, H11 carbon steel, 16MO3 carbon steel, different stainless steel qualities (aisi 304, 316, 310 ...). Depending the application.

GENERAL APPLICATIONS:

Pneumatic transports, exhaust gas control on chimneys, exhaust gas control on combustion processes, gas turbina exhaust gas control...

Actuators: Manual, pneumatic, electric ...
Working pressure: According to the standard manufacturing way these valves are designed to resist 0,5 kg/cm2 at ambient temperature.

- Cement Plants
- Steel Plants
- Chemical plants.
- Power plants.
- ...



TECHNICAL DATA FOR MF SERIES

Standard manufacturing sizes:

From DN50 up to DN3000 (bigger sizes under request) **MD** Series 50x50 up to 3000x3000 (bigger sizes under request) **MD** Series.

Working pressures:

From DN 50 to DN 3000: 0,5 (kg/cm2)
Higher pressures available under request

Flange connection drillings:

The standard flange connection is according to CMO Valves design but any flange design and drill can be done.

Applied Directives:

Directive (PED: ART.3/ CAT1),
Directive (ATEX: Cat. 3 / Zones 2 and 22 GD)

Tightness

From 97% to 99,5% Also available under request 100% tightness with double gate and air flushing system.

ML - series

PRODUCT DESCRIPTION

BIDIRECTIONAL Round damper butterfly valve

Round damper butterfly valve, with bidirectional design. Designed for pneumatic transport of air or gases at different temperatures. Option of manufacturing "WAFER" type or with bored flanges. Watertight integrity between 97% and 99%. Option of using an air sealing system to increase watertight integrity up to 100%. Various seal and gasket materials available.

GENERAL APPLICATIONS:

These butterfly damper valves are suitable to work with a wide range of air and gases. They are particularly suitable for controlling the flow of gas in pipelines.

- Cogeneration Plants
- Electrical powerstations.
- Energy Sector
- Termal Power Stations
- Chemical plants.



TECHNICAL DATA FOR LR SERIES

Standard manufacturing sizes:

From DN80 up to DN3000 (bigger sizes under request) **ML** Series 50x50 up to 3000x3000 (bigger sizes under request) **ML** Series. Also rectangular designs available.

Working pressures:

From DN 50 to DN 3000: 0,5 (kg/cm2)
Higher pressures available under request

Flange connection drillings:

Flange connection: The valve is manufactured with "WAFER" type design.
Bolting the flanges: The valve is manufactured with bored flanges.

In both variants, the flange connections and openings are in line with C.M.O. standard, although these can be tailored to customer requirements upon request.

Applied Directives:

Directive (PED: ART.3/ CAT1),
Directive (ATEX: Cat. 3 / Zones 2 and 22 GD)

Tightness

From 97% to 99,5% Also available under request 100% tightness with double gate and air flushing system.

MF - series



PRODUCT DESCRIPTION

Flanged or wafer butterfly damper valve. Cast or welded body and disc depending the diameter of the valve. Manufactured with different kinds of tightness depending the customer requirements (100% tight, 99,5% tight o 98,5% tight). Fabrication materials: S275JR carbon steel, H11 carbon steel, 16MO3 carbon steel, different stainless steel qualities (aisi 304, 316, 310 ...). Depending the application.

GENERAL APPLICATIONS:

Pneumatic transports, exhaust gas control on chimneys, exhaust gas control on combustion processes, gas turbina exhaust gas control...

Actuators: Manual, pneumatic, electric ...
Working pressure: According to the standard manufacturing way these valves are designed to resist 0,5 kg/cm2 at ambient temperature.

- Cement Plants
- Steel Plants
- Chemical plants.
- Power plants.
- ...

TECHNICAL DATA FOR MF SERIES

Standard manufacturing sizes:

From DN50 up to DN3000 (bigger sizes under request) **MF** Series 50x50 up to 3000x3000 (bigger sizes under request) **MF** Series. Also rectangular designs available.

Working pressures:

From DN 50 to DN 2000: 0,5 (kg/cm2)
Higher pressures available under request

Flange connection drillings:

The standard flange connection is according to CMO Valves design but any flange design and drill can be done.

Applied Directives:

Directive (PED: ART.3/ CATI),
Directive (ATEX: Cat. 3 / Zones 2 and 22 GD)

Tightness

From 97% to 99,5% Also available under request 100% tightness with double gate and air flushing system.

LR - series



PRODUCT DESCRIPTION

Flanged or wafer butterfly damper valve. Cast or welded body and disc depending the diameter of the valve. Manufactured with different kinds of tightness depending the customer requirements (100% tight, 99,5% tight o 98,5% tight). Fabrication materials: S275JR carbon steel, H11 carbon steel, 16MO3 carbon steel, different stainless steel qualities (aisi 304, 316, 310 ...). Depending the application.

GENERAL APPLICATIONS:

Pneumatic transports, exhaust gas control on chimneys, exhaust gas control on combustion processes, gas turbina exhaust gas control...

Actuators: Manual, pneumatic, electric ...
Working pressure: According to the standard manufacturing way these valves are designed to resist 0,5 kg/cm2 at ambient temperature.

- Cement Plants
- Steel Plants
- Chemical plants.
- Power plants.
- ...

TECHNICAL DATA FOR LR SERIES

Standard manufacturing sizes:

From DN50 up to DN3000 (bigger sizes under request) **MF** Series 50x50 up to 3000x3000 (bigger sizes under request) **MF** Series. Also rectangular designs available.

Working pressures:

From DN 50 to DN 2000: 0,5 (kg/cm2)
Higher pressures available under request

Flange connection drillings:

The standard flange connection is according to CMO Valves design but any flange design and drill can be done.

Applied Directives:

Directive (PED: ART.3/ CATI),
Directive (ATEX: Cat. 3 / Zones 2 and 22 GD)

Tightness

From 97% to 99,5% Also available under request 100% tightness with double gate and air flushing system.

PL - series



PRODUCT DESCRIPTION

Flanged light butterfly, square, rectangular louvred type, several blades. Welded construction body and disc. Manufactured with different kinds of tightness depending the customer requirements (100% tight, 99,5% tight o 98,5% tight). Fabrication materials: S275JR carbon steel, H11 carbon steel, 16MO3 carbon steel, different stainless steel qualities (aisi 304, 316, 310 ...).

Depending the application.

GENERAL APPLICATIONS:

Pneumatic transports, exhaust gas control on chimneys, exhaust gas control on combustion processes, gas turbina exhaust gas control...

Actuators: Manual, pneumatic, electric ...

Working pressure: According to the standard manufacturing way these valves are designed to resist 0,25 kg/cm² at ambient temperature.

- Cement Plants
- Steel Plants
- Chemical plants.
- Power plants.
- ...

TECHNICAL DATA FOR MF SERIES

Standard manufacturing sizes:

From 400X400 up to 5000X5000 (bigger sizes under request). Also rectangular designs available.

Working pressures:

0,25 (kg/cm²)

Higher pressures available under request.

Flange connection drillings:

The standard flange connection is according to CMO Valves design but any flange

design and drill can be done.

Applied Directives:

Directive (PED: ART.3/ CAT1),

Directive (ATEX: Cat. 3 / Zones 2 and 22 GD)

Tightness

From 97% to 99,5% Also available under request 100% tightness with double gate and air flushing system.

UL - series



PRODUCT DESCRIPTION

Flanged or wafer butterfly damper valve. Cast or welded body and disc depending the diameter of the valve. Manufactured with different kinds of tightness depending the customer requirements (100% tight, 99,5% tight o 98,5% tight). Fabrication materials: S275JR carbon steel, H11 carbon steel, 16MO3 carbon steel, different stainless steel qualities (aisi 304, 316, 310 ...). Depending the application.

GENERAL APPLICATIONS:

Pneumatic transports, exhaust gas control on chimneys, exhaust gas control on combustion processes, gas turbina exhaust gas control...

Actuators: Manual, pneumatic, electric ...

Working pressure: According to the standard manufacturing way these valves are designed to resist 0,5 kg/cm² at ambient temperature.

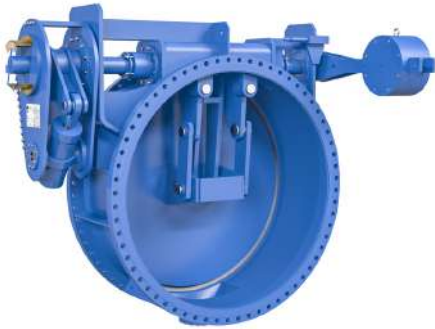
- Cement Plants
- Steel Plants
- Chemical plants.
- Power plants.
- ...

ACCESORIES FOR PL-UL SERIES

Mirror Polished Gate, Stellite gate, Air injection in the packing gland, Flushing holes in body
Mechanical Limit Switches, Inductive Switches and Positioners Solenoid valves, Connection electrical boxes, electrical wiring and pneumatic piping, Stroke limiting mechanical stops Mechanical locking device



MP - series



PRODUCT DESCRIPTION

Flanged or wafer butterfly damper valve. Cast or welded body and disc depending the diameter of the valve. Manufactured with different kinds of tightness depending the customer requirements (100% tight, 99,5% tight o 98,5% tight). Fabrication materials: S275JR carbon steel, H11 carbon steel, 16MO3 carbon steel, different stainless steel qualities (aisi 304, 316, 310 ...). Depending the application.

GENERAL APPLICATIONS:

Pneumatic transports, exhaust gas control on chimneys, exhaust gas control on combustion processes, gas turbina exhaust gas control...

Actuators: Manual, pneumatic, electric ...
Working pressure: According to the standard manufacturing way these valves are designed to resist 0,5 kg/cm2 at ambient temperature.

- Cement Plants
- Steel Plants
- Chemical plants.
- ...



TECHNICAL DATA FOR MP SERIES

Standard manufacturing sizes:

From DN50 up to DN600
(bigger sizes under request)

Working pressures:

From DN 50 to DN 600: 1 (kg/cm2)
Higher pressures available under request.

Flange connection drillings:

The standard flange connection is according to CMO Valves design but any flange design and drill can be done.

Applied Directives:

Directive (PED: ART.3/ CAT1),
Directive (ATEX: Cat. 3 / Zones 2 and 22 GD)

Tightness

100%

SD-SP - series



PRODUCT DESCRIPTION

Specially designed to be mounted in installations for transport of solids of fine grain as cement, ash, sand, etc In all type of industry with pneumatic transport, by pipes with flanges or in inlets and outles of silos. The normal in this kind of work where the standard pressures are from 0 to 2kg/cm2.

Other pressures to be discussed.

Construction: Body in cast iron, steel, stainless steel, etc. Seat: metal/metal - Aisi 304 + stellite metal/rubber - Aisi 304 + EPDM Shafts: Aisi 304
Tightness to the outside, depending on the temperature and working conditions.

Temperature: from -10 to +900°C

Drivers: Manual, pneumatic, electric, etc.

- Cement Plants
- Steel Plants
- Chemical plants.
- Power plants.
- ...

TECHNICAL DATA FOR SD-SP SERIES

Standard manufacturing sizes:

From DN50 up to DN600
(bigger sizes under request)

Working pressures:

From DN 50 to DN 600: 1 (kg/cm2)
Higher pressures available under request

Flange connection drillings:

The standard flange connection is according to CMO Valves design but any flange design and drill can be done.

Applied Directives:

Directive (PED: ART.3/ CAT1),
Directive (ATEX: Cat. 3 / Zones 2 and 22 GD)

Tightness

100%



MV - series



PRODUCT DESCRIPTION

Flanged or wafer butterfly damper valve. Cast or welded body and disc depending the diameter of the valve. Manufactured with different kinds of tightness depending the customer requirements (100% tight, 99,5% tight o 98,5% tight). Fabrication materials: S275JR carbon steel, H11 carbon steel, 16MO3 carbon steel, different stainless steel qualities (aisi 304, 316, 310 ...). Depending the application.

GENERAL APPLICATIONS:

Pneumatic transports, exhaust gas control on chimneys, exhaust gas control on combustion processes, gas turbina exhaust gas control...

Actuators: Manual, pneumatic, electric ...

Working pressure: According to the standard manufacturing way these valves are designed to resist 0,5 kg/cm² at ambient temperature.

- Cement Plants
- Steel Plants
- Chemical plants.
- ...

TECHNICAL DATA FOR MP SERIES

Standard manufacturing sizes:

From DN50 up to DN600
(bigger sizes under request)

Working pressures:

From DN 50 to DN 600: 1 (kg/cm²)
Higher pressures available under request.

Flange connection drillings:

The standard flange connection is according to CMO Valves design but any flange design and drill can be done.

Applied Directives:

Directive (PED: ART.3/ CAT1),
Directive (ATEX: Cat. 3 / Zones 2 and 22 GD)

Tightness

100%



AND BEHIND CMO, THE QUALITY, GUARANTEE AND COMPROMISE WITH THE ENVIROMENT

CMO commitment with the enviroment is full. And is full because a big thing depends on it, the future of all of us, and this is why we work in a responsible way to pro-tect the enviroment. And we do it in two ways:

- Using non toxic materials, 100% recyclable at the end of their useful life.
- Providing the best solutions to our customers so they can also help to protect the enviroment. Cus-tomers that work in potable water plants, sewage water treatment plant, potable water pumping sta-tions and energy recovering...



www.cmovalves.com



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