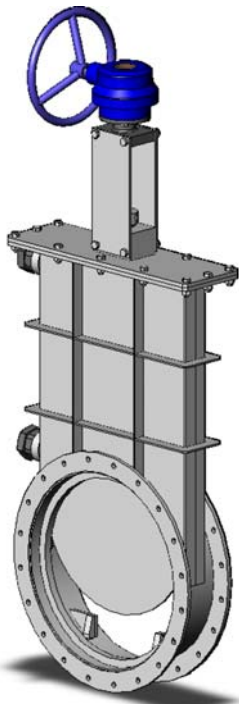




VALVES AND DAMPERS FOR AIR & GASES



PRODUCT DESCRIPTION

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

This damper knife gate valve is appropriate for a wide range of air & gases applicationsigned for a wide range of applications such as:

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



TECHNICAL DATA FOR GR 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 design but any flange design and drill can be done

Applied Directives:

Directive 98/37/CE (machinery), Directive 97/23/CE (PED: Group 2),
Directive 94/9/CE (ATEX: Group II, Cat. 3 / Zones 2 and 22)

Tightness

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



PRODUCT DESCRIPTION

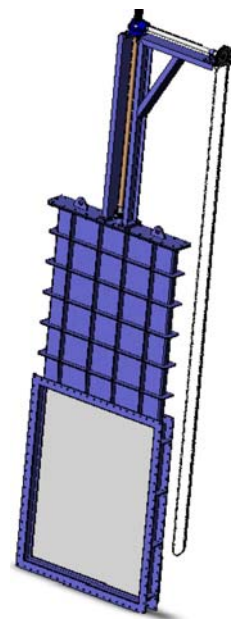
Square or Rectangular Damper guillotine type GR manufactured by CMO is especially useful as an element of isolation to allow inspections, maintenance and repairs on the pipes.

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

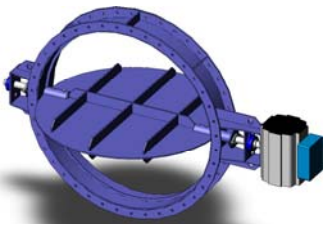
This damper knife gate valve is appropriate for a wide range of air & gases applicationsigned for a wide range of applications such as:

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



ACCESORIES 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



PRODUCT DESCRIPTION

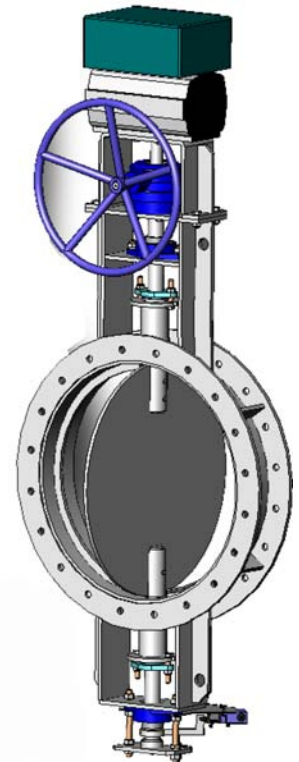
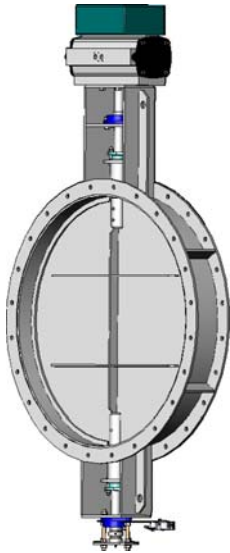
Flanged or wafer butterfly damper valve. Cast or welded body and disc depending the diameter of the valve. Manufactured with different kinds of tightness depending the customer requirements (100% tight, 99,5% tight o 98,5% tight). Fabrication materials: S275JR carbon steel, H11 carbon steel, 16MO3 carbon 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-LR SERIES

Standard manufacturing sizes:
From DN50 up to DN3000 (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 design but any flange design and drill can be done

Applied Directives:
Directive 98/37/CE (machinery), **Directive 97/23/CE (PED: Group 2)**,
Directive 94/9/CE (ATEX: Group II, Cat. 3 / Zones 2 and 22)

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

PRODUCT DESCRIPTION

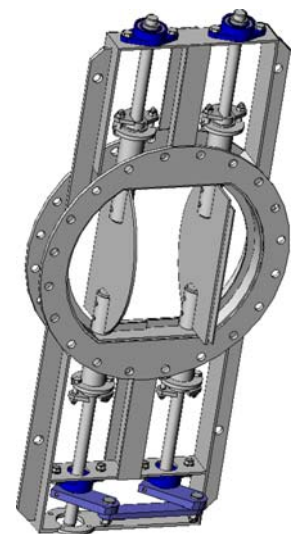
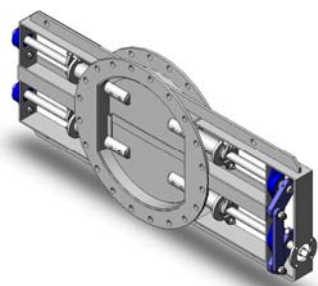
Flanged or wafer butterfly damper valve. This valve is equal to the type MF with the difference that instead of one disc the valve is composed by several blades. The valve is manufactured with welded construction. Manufactured with different kinds of tightness depending the customer requirements (100% 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 MF-LR 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

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 PL-UL 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 design but any flange design and drill can be done

Applied Directives:
Directive 98/37/CE (machinery), **Directive 97/23/CE (PED: Group 2)**,
Directive 94/9/CE (ATEX: Group II, Cat. 3 / Zones 2 and 22)

Tightness
From 97% to 99,5%



PRODUCT DESCRIPTION

Flanged light butterfly, square, rectangular single blade. 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.
- ...



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

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 outlets 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.



TECHNICAL DATA FOR SD-SP SERIES

Standard manufacturing sizes:
From DN 50 up to DN 600 (bigger sizes under request)

Working pressures:
1 (kg/cm²)

Higher pressures available under request

Flange connection drillings:

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

Applied Directives:

Directive 98/37/CE (machinery), **Directive 97/23/CE (PED: Group 2)**,
Directive 94/9/CE (ATEX: Group II, Cat. 3 / Zones 2 and 22)

Tightness 100%



SERIES MP VALVES FOR GASES

PRODUCT DESCRIPTION

Round-port isolating valve actuated by a three-lever system that rotates the disc through 90°.

Welded construction can withstand high pressures up to 40 bar, depending on dimensions, and temperatures up to 500°C.

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 10 kg/cm² at ambient temperature (higher pressures under request)

- Cement Plants
- Steel Plants
- Chemical plants.



TECHNICAL DATA FOR MP SERIES

Standard manufacturing sizes:
From DN 50 up to DN 600 (bigger sizes under request)

Working pressures:
1 (kg/cm²)

Higher pressures available under request

Flange connection drillings:

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

Applied Directives:

Directive 98/37/CE (machinery), **Directive 97/23/CE (PED: Group 2)**,
Directive 94/9/CE (ATEX: Group II, Cat. 3 / Zones 2 and 22)

Tightness 100%

C.M.O.

Amategui Aldea 142, 20400 Txarama-Tolosa (SPAIN)

Phone: + 34 902 40 80 50 / Fax: + 34 902 40 80 51 / cmo@cmo.es <http://www.cmo.es>