

# HD SERIES

## HOLLOW JET DISCHARGE VALVE



### HD SERIES

#### DESCRIPTION

The valve consists of a cylindrical body and a cone is used as a seat that performs the mission of forming the jet fan. The body has radial ribs or fins that carry out the mission of channelling the jet. The outlet is an annular opening. On the edge of the radial fins, a sealing cylinder slides which, activated by two external rods, opens to achieve a required output flow or closes completely.

Accessories to control fluid expansion:

- Deflector
- Concentrator (fixed deflector).

The flow enters through the back of the valve and crashes into a cone at the front that forces it to exit radially or like an umbrella, forming a hollow conical jet in the centre, hence its name hollow jet. When entering the atmosphere, the energy is dissipated by spraying the fine drops that are obtained.

Optionally it can be offered for submerged use.

#### GENERAL APPLICATIONS

This valve is used especially as a closing or regulating organ in the bottom discharges of dams and reservoirs, since it is an economical way to regulate their outlet, to obtain an ecological flow.

Designed for applications such as:

- Hydroelectric power stations.
- Water treatment.

#### ACTUATORS

- **HYDRAULIC:** In addition to a valve with hydraulic cylinders, it is also possible to supply: A hydraulic control unit, electric control panel and hydraulic piping to connect all the hydraulic units to the valves.

- **ELECTRICAL:** Compared to the hydraulic valve, those operated by an electric actuator need less maintenance, less space and can be supplied with indicator elements with a 4-20mA signal connected to control units to regulate the valve opening percentage.

#### SIZES

DN50 to DN2500.

*Other DN's on request.*

#### WORKING PRESSURE ( $\Delta P$ )

Maximum working pressure adapts to the needs of the customer in every project. These penstocks are designed to comply with working conditions in the place of installation.

#### DIRECTIVES

See document of directives applicable to CMO Valves.



*For further information on categories and zones please contact CMO Valves. Technical-Commercial Department.*

#### QUALITY DOSSIER

All valves are tested hydrostatically at CMO Valves and material and test certificates can be provided.

- Body test = working pressure x 1.5.
- Seal test = working pressure x 1.1.