

Internal Plug & Cage Multistage Choke Valves

CCM/CCH/CCP/CCE -D/M Series



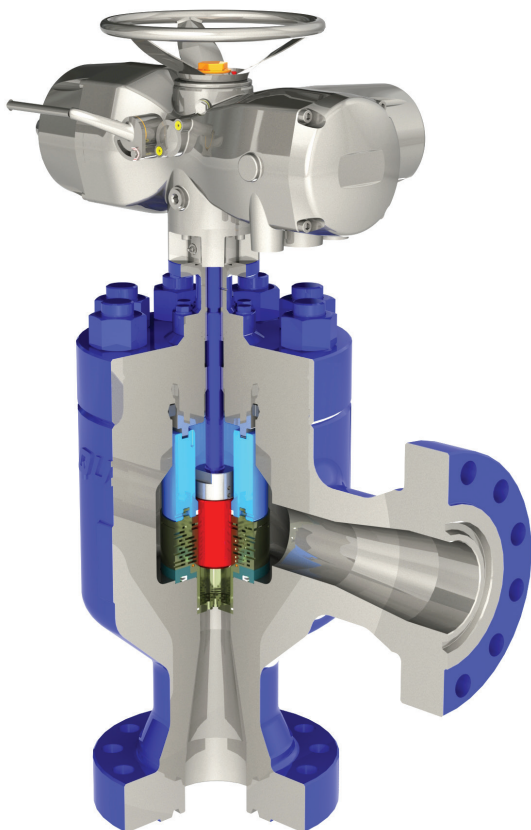
STANDARD

DOUBLE- OR MULTI- STAGE

DESCRIPTION

The QUAM **Multistage Choke Valves -D/M Series** is composed of Internal Plug & Cage Choke Valves (manual and actuated) specifically designed with a fully-customized multistage trim

THE VALVE



GENERAL APPLICATION

These Valves are suitable for installation on Christmas Trees, Production/Water injection Manifolds specifically **designed to handle the most critical process data and severe conditions in particular applications**. They are used where **high pressure drops** and **high fluid velocity** might cause cavitation issues, high noise levels, excessive vibrations, etc.

KEY FEATURES

Trim Design

Ported Cage with Internal Plug trim design is available with customized characteristics. The flow passing across the cage impinges on itself and so turbulence and throttling wear are dissipated in the centre of the valve and not on valve outlet. The valve is provided with spacer. Valve Trim is always **fully-customized in order to perfectly comply to the given process conditions**

Erosion Resistant Trim

Valve Trim in Solid Tungsten Carbide to provide the best erosion resistance

Metal To Metal Sealing

Without soft parts it is improved sealing performance with any process fluid

Position Indicator

AISI 316 SS Engraved Position Indicator available in Micrometric or Bean Size (1/64") scale, % opening, CV factor

No Threads In Valve Body

Trim Components are not Screwed in the Valve Body in order to facilitate disassembly

Proprietary Stem Packing Design

QUAM experience have been put in a special Stem Packing design for Smooth Operation, long life service and low emissions

Heavy Duty Thrust Bearings

High performance Thrust Bearings allow less load on the handwheel and easy operation

Exceed PR-2 Requirements

Multistage Choke Valves -D/M Series performance exceed API-6A PR-2 requirements

TECHNICAL SPECIFICATIONS

Valve Action	It depends on Valve operation
Operated	Manual complete with Handwheel / Gearbox or Hydraulic/ Pneumatic/ Electric Actuated
Valve Size Range	API-6A From 1 13/16" through 11" ANSI From 2" through 12"
Valve Pressure Ratings	API-6A From 2.000 through 20.000 PSI ANSI From 150 through 2500 lbs
Valve Connections	Flanged, Studded, Buttweld, Hub or Customized Connections
Operating Media	Oil, Natural Gas, Water and any combination of them
Operating Temperatures	-60 °C to +250 °C
Shut-off Class	ANSI/FCI Class IV as standard Class V & VI available on request

BENEFITS

Exceptional Flow Control

Valve Trim is designed to perform an accurate Flow Control thanks to a variable number of pressure reduction stages

Customized End To End Dimensions

The possibility to customize end to end dimensions allow the users an easy replacement without pipeworks

Heavy Duty Construction

Valve is specially designed to improve reliability, Italian origin of Forging materials is the guarantee of Valve quality

Easy & Safe Maintenance

Special considerations in design are made to permit a safe disassembly of the pressure containing components

No Special Tools

Multistage Choke Valves -D/M Series disassembly can be executed without any Special Tool, only Standard Wrenches are requested

100% ITALIAN MANUFACTURING

QUAM Valves are Engineered and Manufactured entirely in Italy

CERTIFICATIONS

API-6A (up to PSL-4)

PED 2014-68-EU

ATEX 2014-34-EU

MACHINERY DIRECTIVE 2006/42/EC