

Masoneilan

a Baker Hughes business

Masoneilan™ 10000 Series Double Ported Globe Valves

The 10000 Series double seated control valves are semi-balanced designs, providing high allowable pressure drops, reduced actuator thrust requirements, and large flow areas to effectively handle dirty fluid applications. Standard features include:

Enhanced Performance and Reliability

Separate top and bottom guides in the Masoneilan 10000 Series provide heavy duty plug and stem support throughout the valve stroke range. This results in excellent throttling control characteristics and high product reliability.

High Pressure Drop Capability

The 10000 Series offers a semi-balanced trim construction, which allows for application in higher pressure drop applications using standard actuation. This also helps to reduce product complexity and overall assembly size and weight.

Dirty Service Design

Large flow areas within the 10000 Series design, makes it an excellent choice for applications involving dirty fluids. Foreign particles can pass through the valve without negatively affecting control performance.

Easy Field Maintenance

The 10000 Series is designed for top and bottom entry, allowing for quick access to the key trim and soft good components. This also permits easy access to the top and bottom guides for repair or replacement.

Reduced Emissions

The 10000 Series can be supplied with the Masoneilan Low-E Packing design to provide low emissions performance meeting various environmental regulations worldwide.



NACE Compliance

Construction for Sour Service Applications in accordance with NACE standard MR 0103 is readily available.

Applications requiring compliance to MR 0175, 2003 Rev or ISO 15156 can also be provided.

Specifications

Flow Direction	
All trim:	Flow through both ports
Body	
Type:	Double seat globe
Body Bonnet and Lower Flange	
Type:	Bolted
Bonnet and Lower Flange	
Materials:	Carbon steel
	Stainless steel
	Chrome-molybdenum steel

Trim	
Plug type:	Double seat
	v-port contoured
Seat ring:	Threaded
Guide:	Heavy top and bottom guiding
Capacity:	Full area
	Reduced capacity (0.4 factor)
C _v ratio:	50:1
Flow characteristics:	Equal percentage
	Quick opening
	Linear
Actuator	
Type:	Spring diaphragm
Handwheel	Optional

Valve Size ¹		Body Rating	Body & Bonnet Material	Temperature Range				Seat Leakage IEC 60534-4 and ASME/FCI 70.2 Class
				Standard Bonnet		Extension Bonnet		
inch	mm			min.	max.	min.	max.	
0.75 to 16	20 to 400	ASME class 150 to 600 (PN 20 to 100)	Carbon Steel	-20°F (-29°C)	+450°F ¹ (-232°C)	-20°F (-29°C)	+800°F (+427°C)	II
			Stainless Steel	-20°F (-29°C)	+450°F ¹ (-232°C)	-148°F (-100°C)	+800°F (+427°C)	
			Chrome-Moly	32°F (0°C)	+450°F ¹ (-232°C)	32°F (0°C)	+800°F (+427°C)	
			NACE	-20°F (-29°C)	+450°F ¹ (-232°C)			

1. Maximum temperature shown is with PTFE packing and Low-E Packing. Extended max. operating temperature of 800°F (427°C) allowable with Graphite packing.
 2. Low-E Packing for low emissions applications is limited to maximum pressure and temperature as shown in chart below.

Pressure and Temperature Rating of Low-E Packing

