



**Features**

MDC's NEW Line of aluminum gate valves feature a robust design and cost effective solution for a multitude of applications.

- Aluminum gate valves are available in standard sizes ranging from 1-1/2" (40mm) through 6" (160mm) ID with manual actuation and 1-1/2" (40mm) through 20" (500mm) with pneumatic actuation.
- Standard flange configurations include ISO KF & LF as well as JIS with options for ASA and Del Seals on request.
- The aluminum body is precision machined from a solid billet of high strength 6061-T6 aluminum. This eliminates pinholes and virtual leaks that can appear in cast or welded aluminum valves.
- Dual quad ring shaft seals are used to improve seal life and leak integrity while increasing system uptime to as many as 400k cycles.
- High performance PEEK components help reduce friction and lower particle levels.
- A large diameter direct drive shaft is utilized to help reduce vibration during actuation
- Split body design optimizes on tool maintenance and reduces downtime.

**CIRCULAR GATE VALVES**

**Standard Technical Specifications**

Valve body and mechanism	6061-T6 aluminum
Shaft	1.5" - 3" (DN40-80) Al 4" - 20" (DN100-500) 304SS
Carriage	6061-T6 Aluminum / PEEK
Bonnet / gate / shaft seals	Viton®

**Vacuum**

Pressure range	7.5 x 10 <sup>-7</sup> TORR (1 x 10 <sup>-7</sup> mbars)
Leak rate: gate	< 1.5 x 10 <sup>-8</sup> TORR (< 2 x 10 <sup>-9</sup> mbar l/sec)
Differential pressure	23 PSIG (≤ 1.6 bar in either direction)
Differential pressure at opening	≤ 22.5 mTORR (≤ 30 mbar)

**Temperature**

Valve Body and Gate	≤ 120°C
Actuator	≤ 80°C
Solenoid	≤ 60°C

**Mechanism**

Air Service	80 psig max
Position indicator, Magnetic Reed	115 VAC or 28 VDC, 20 mA

**Mounting Position**

Any

**Cycles**

Cycles until service	1.5" - 6" (DN40 -160) 400K cycles 8" - 20" (DN200 -500) 250K cycles
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**Options**

- Solenoid: 24 VDC, 110 VAC. 240 VAC
- Roughing Ports
- Alternative sealing materials
- Heater jackets
- Custom Flange options: including ASA or Del Seal™



**Engineered Process Solutions**

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