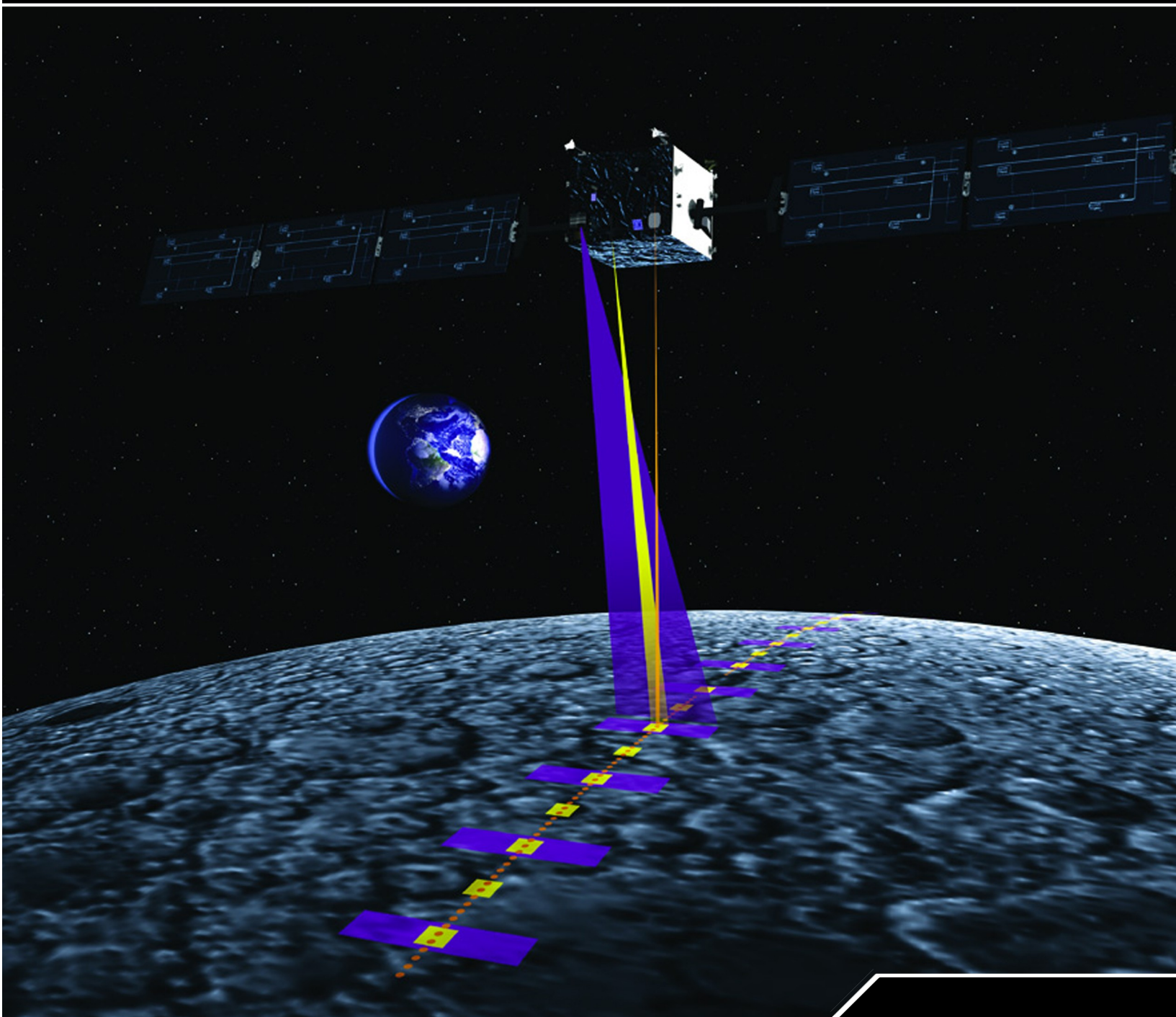


MV602L

MINIATURE LATCH

MAGNETICALLY / LATCHING VALVE



 **MAROTTA®**

We're in Control

MV602L / MINIATURE LATCH VALVE

Magnetically Latching

Miniature, Magnetically Latching

The Marotta Model # MV602L is a magnetically latching, high-pressure valve that shuttles open and closed by switching current polarity. The construction involves conventional machining practices, stainless steel, all-welded construction, and a plastic seat.



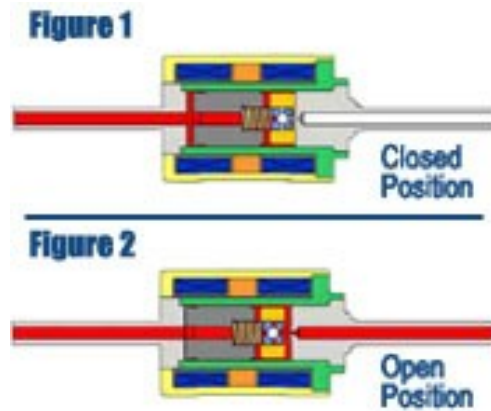
Applications:

- Xenon Feed Systems
- Micro-Propulsion
- Cold Gas Propulsion

Model	MV602L	Requirement
Service	-	Inert Gas
Voltage Supply	-	28± 4 VDC
Power	-	<10 watts peak
Valve Mass	w/o lead wires	<50 gm
Response Time	Opening Closing	<10 msec <10 msec
Leakage	Internal External	<1 x 10 ⁻⁴ sccs GHe <1 x 10 ⁻⁶ sccs GHe
Operating Temp Range	-	-40° to 50°C
Pressure	MEOP Proof Burst	2000 psia 3000 psia 4000 psia
Flow , Rated	Cd=0.65	0.014" ESEOD
Operating Mode	-	Polarity Switched

Note: The listed performance data represents specific program requirements and not the design

- Figure 1 shows the MV602 in the closed position, with red indicating the wetted area of the valve. In the closed position, sealing is achieved by the spring loading of the seat as shown.
- When commanded, the plunger assembly moves to the open position, lifting the poppet off the set and allowing fluid to pass through the valve as indicated in Figure 2. The permanent magnet located between the two solenoid coils ensures that the valve latches in the last commanded position, enabling the valve to remain open without power.
- To close the valve, a reversed polarity signal will switch the flux path to overcome the force of the permanent magnet and move the plunger to the closed position.



MAROTTA®

78 Boonton Avenue
P.O. Box 427
Montville, NJ 07045 USA
1.973.334.7800 marotta.com

WHEN IT COMES TO
SPECIALTY FLUID CONTROLS
WE'RE IN CONTROL

Rev 8/09