

SMARTLINK™ MRV

Intelligent MICRO-RATIO® Valve Series



- **Optimize fuel efficiency and meet stringent emissions standards** through precise, repeatable flow control.
- **SMARTLINK™ MRV is an electronic parallel positioning system** for air/fuel ratio control; for use in industrial applications requiring a high degree of precision, repeatability and durability.
- **Complete system** includes up to four valves and a Control Interface Unit to electronically link the valves to the user's process controller.
- **Factory-calibrated valve and actuator assembly** includes NEMA 4X valve actuators with integrated position feedback and heavy duty planetary gearheads for reliable, long life operation.
- **Compact, robust valve design** mounts in any orientation without additional support.
- **Each SMARTLINK™ Valve is continuous duty and fully adjustable** to 0.1 degrees accuracy.
- **Control Interface stores a 22 point user-customized position profile** for each valve; offered in several configurations with optional equipment available.
- **Non-incendive for Class I Division 2** Groups A, B, C and D Hazardous (Classified) Indoor and Outdoor (Type 4X for Valve Actuator) locations.
- **Maintenance-free operation**; no lubrication required.
- **Electronic passcode protection** eliminates valve profile tampering.
- **Simple set-up**; no PC required.



Contact Esys for more information about this product:
 Esys® The Energy Control Company™
 4520 Stine Road, Ste 7
 Bakersfield, CA 93313
 (661) 833-1902

email: esys@esys.us
 website: <http://www.esys.us>



SMARTLINK™ MRV

Intelligent MICRO-RATIO® Valve Series

The Maxon SMARTLINK™ MICRO-RATIO® Valve (MRV) is an industrial parallel positioning system for combustion applications that require a high degree of precision, repeatability, tamper resistance, and durability. In addition, SMARTLINK™ MRV interfaces with all burner management and flame safety systems, simplifying retrofit applications. The system is simple to set-up and does not require a personal computer in the field for commissioning.

SMARTLINK™ MRV includes: a) 2, 3, or 4 Valve Actuators directly coupled to Maxon valves, and b) a Control Interface unit which serves as a manual station, commissioning interface, and “gateway” between the Valve Actuators and the user’s process controller, PLC, or distributed control system (DCS).

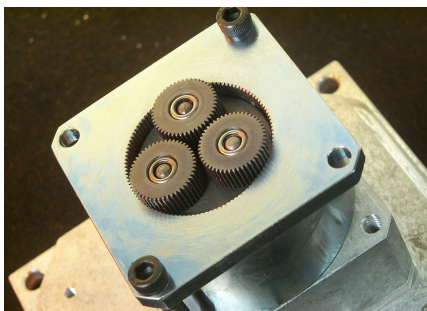
The Control Interface also synchronizes valve movement and is available in a complete factory-wired assembly with a NEMA 4X enclosure. This “packaged” solution is Class I, Division 2 approved and eliminates the need for purging systems. It provides a turnkey, electronic air/fuel ratio control solution for hazardous petrochemical environments.

The SMARTLINK™ **Valve Actuator** design is an industrial rated, factory-calibrated assembly. It incorporates a heavy-duty, planetary gear-head with integrated, long-life position feedback and a stepper motor for continuous duty, high precision control of Maxon control valves. Each Valve Actuator is powered by 24VDC and includes a digital position control loop and a communications interface that ensures reliable operation in electrically noisy environments. The small footprint, NEMA 4X and Class I, Division 2 approvals, and superior position control performance make this product a very attractive alternative to pneumatic equipment.



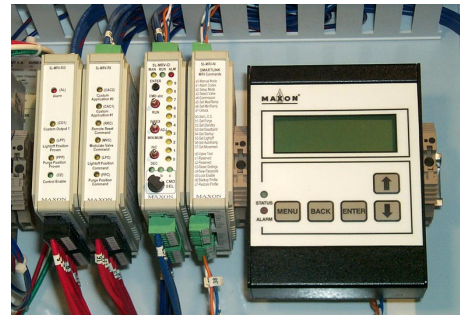
SMARTLINK® gas valve (above) and air valve (right) assemblies

The SMARTLINK™ MRV **Control Interface** is a DIN rail-mounted device that electronically “links” and synchronizes valve movement for precision air/fuel ratio control. Several front-mounted switches and lights are provided for displaying alarms, system configuration, and valve characterization. The Control Interface also provides a precision 4-20mA firing rate feedback signal. The unit is offered in a number of configurations. Optional equipment includes Maxon Relay Input and Output Interfaces, a User Display, universal power supply, factory-wired panel assemblies, and several NEMA 4X enclosures.



Inside view of SMARTLINK® Actuator, showing planetary gear heads.

Control Interface with optional User Display, Relay Input, Output, and Network Interfaces in pre-wired panel assembly



Contact Esys for more information about this product:
 Esys® The Energy Control Company™
 4520 Stine Road, Ste 7
 Bakersfield, CA 93313
 (661) 833-1902

email: esys@esys.us
 website: <http://www.esys.us>

