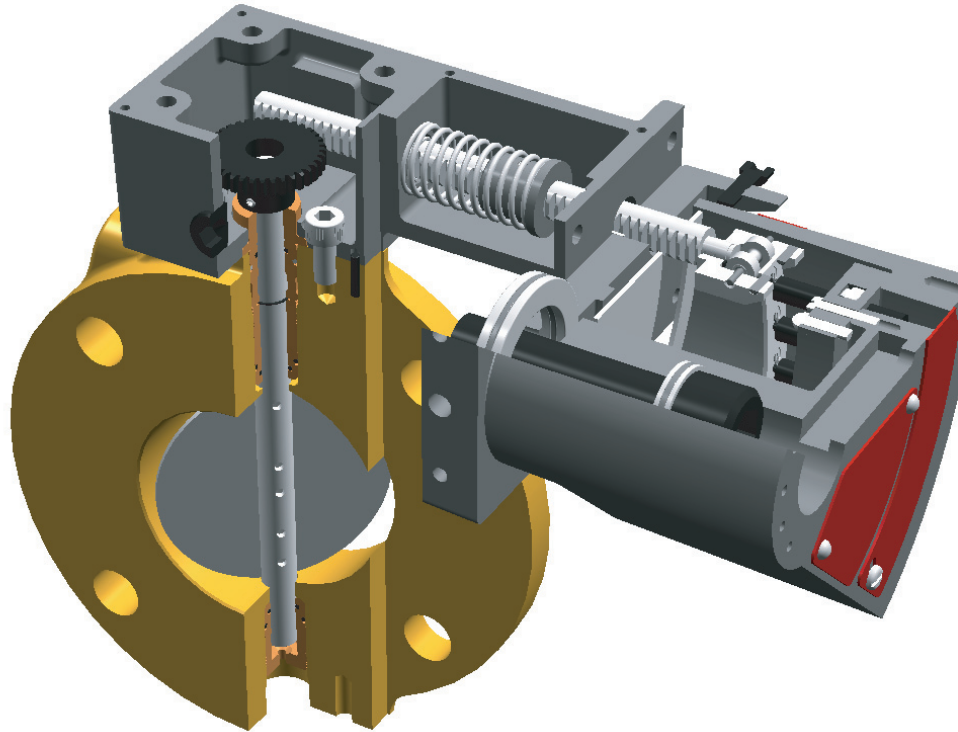


# Series “A” Flow Control Valves



*Cut-away of 3" positive push/pull SYNCHRO Valve*

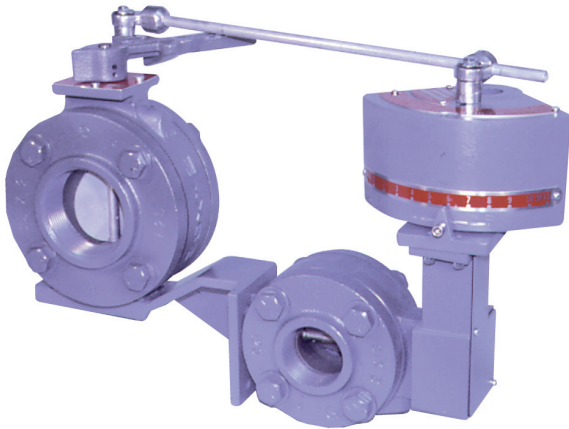
- **Valve bodies are designed to meet ANSI specifications** (DIN flange option for future availability)
- **High pressure rating**
- **Cast iron, carbon steel and brass bodies**
- **Positive push/pull actuator**
- **SYNCHRO Valves** may be used independently for individual adjustable gradient fuel flow control, or in tandem with other fuel control valves for more sophisticated multi-zone control or multi-fuel applications.
- **Low torque**

# Series “A” Flow Control Valves

## Design and Application Details

### Principle of Operation

MICRO-RATIO® Valve assemblies typically consist of an air butterfly valve mechanically linked to one or more adjustable gradient SYNCHRO Fuel Control Valves(s).



View of a A-3" x 1-1/2" -A MICRO-RATIO® Valve

The tandem linkage gives accurate proportioning of air/fuel(s) ratios required for your specific burner system/application.

The multiple screw adjustment feature of the SYNCHRO Valve provides a mechanical means of adjusting the air/fuel(s) ratios at each of twelve valve positions throughout the capacity range of each valve. This provides accurate fuel/air control.

**Air-gas-oil valves in tandem-linked combination** are ideal for multi-zone or stand-by fuel system control.

**Air-gas-oil SYNCHRO Valves may be used independently** for single control or throttling of multiple burners.

**SAFETY NOTE: Never install valves intended for air service in a fuel application.**

### Nomenclature

MICRO-RATIO® Valve assemblies are designated by listing the individual valves, starting with the air valve, then each of the fuel valves to be included, as well as their relative position in the assembly (bottom to top).

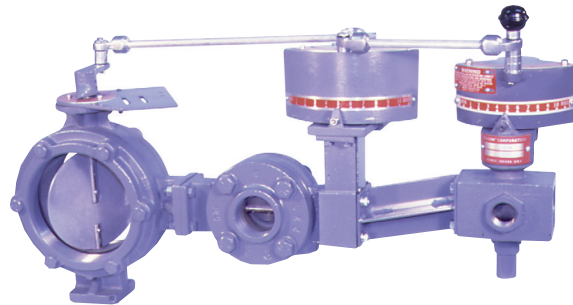
#### Examples:

*“Duplex” MICRO-RATIO® Valve assembly*

**A-4" X 1-1/2" -A**  
(air) X (gas)

*“Quadriplex” MICRO-RATIO® Valve assembly*

**M- 10" X 4" -A X 1/2" -O -200 X 2" -A**  
(air) X (gas) X (oil) X (gas)



View of Triplex M-6" x 1-1/2" -A x 1/2" -P

### Design Features

Series “A” Flow Control Valves are available in manual handle and positive push/pull SYNCHRO versions.

Valve bodies are available in cast iron, steel and brass versions. All versions have a stainless steel shaft and disc. Brass versions are compatible for oxygen service.

The positive push/pull actuator is tested to over 250,000 cycles.