

Do the **PNEUMATIC ACTUATORS** on your **FISHER CZA TYPE VALVES** allow 0.1% resolution and 0.2% repeatability? Can you continuously modulate with a full stroke speed of 50 milliseconds?

Or any of these?

Linearity	< 1%
Hysteresis	< .5%
Response level	0.03 ma
Ambient temperature	-15° to +150°F
Speed - throttling	to 50 msec
Speed - trip	to 25 msec
Input signals	4-20 ma
Stroke	to 1 1/4 in.
End of Stroke	Cushioned
Thrust	to 50,000 lbs.
Materials	
Body	High Strength Hard Anodized Aluminum
Piston stem	Stainless steel
Wear Parts	Alloy Steel
Bearings	Alloy Bronze



DIDN'T THINK SO!

You can with BAFCO 702 Series ELECTRO-HYDRAULIC ACTUATORS!

Not even if you have older series electro-hydraulics, can you achieve the performance and life of the BAFCO 702.

Bulletin ACV

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- BAFCO model 702 series hydraulic actuator
- MOOG servo valve
- BAFCO LVDT for position feedback
- Mounting adaptation for direct mount to any Fisher CZA type valve or any drop-in replacement valve such as the McCartney PCV valve.

BAFCO skid mounted Hydraulic Pumping Units

Model 717-2-15 - actuates 1-4 valves



Model 717-2PRE-60 actuates 5 or more valves



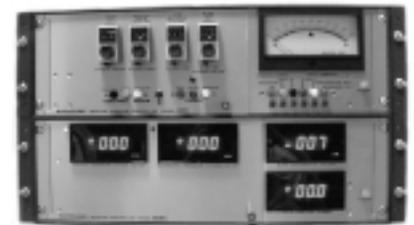
BAFCO Model 852-1 Servoamplifier



BAFCO Model 713-1 - Field Panel - with accumulator (s)



BAFCO 835 Process Controller



OPTIONAL EQUIPMENT

- Limit Switches for end of stroke indication
- High Pressure Socket Weld Tube & Pipe Fittings per SAE Code 61

BAFCO

Functionality by Design
Dependability by Experience

The key technique in CRITICAL and DIFFICULT PROCESS CONTROL is to make the control loop operate faster than the process itself. This requires the final positioning element to be of high dynamic response. BAFCO electronic-hydraulic positioners have the basic high stiffness and precise and rapid reversal capabilities, which produce infinite resolution of valve position, with high frequency response.

Why hydraulics?

- Hydraulics are readily modulated or controlled in both force and velocity
- Hydraulics have very high efficiencies in conversion of pressure to thrust
- Hydraulics provide convenient energy storage that can be used for high speed modulation or shutdown operations
- Hydraulics operate over a wide range of velocities and pressures
- Maintenance costs of hydraulics are lower as all moving parts are submerged in hydraulic fluid and continually lubricated
- Noise levels are dramatically reduced - no air venting to atmosphere
- No concern for wet air supply freezing in cold weather
- Size to force output ratio is much greater than with pneumatics - hydraulic actuators are 75% smaller than pneumatic actuators
- Eliminate leakage with leak proof components and connections using manifold construction and SAE Code 61 pipe and tube fittings
- LVDT internally mounted to protect from atmosphere
- No external moving pressure seals
- By using jet pipe servovalves, systems are much more dirt tolerable than existing servo controlled hydraulic systems

Why BAFCO?

For over 40 years, BAFCO has designed and manufactured high reliability, high response electro-hydraulic valve actuators, process controls and hydraulic pumping units to petrochemical plants, refineries and rocket engine test facilities the world over. BAFCO has achieved a reputation as the LEADER in CRITICAL and DIFFICULT PROCESS CONTROL.

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OTHER PRODUCTS BY BAFCO

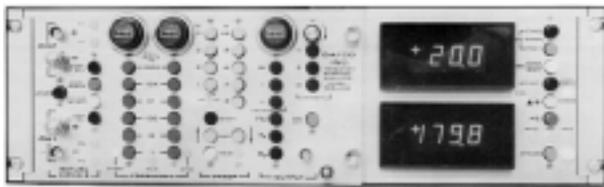
SLIDE & PLUG VALVE ACTUATORS
For FCC Refineries



BUTTERFLY VALVE ACTUATORS
For Expander Turbines



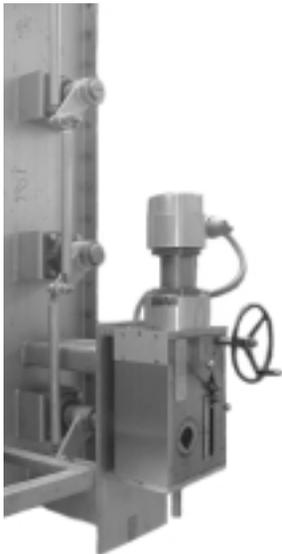
FREQUENCY RESPONSE ANALYZERS



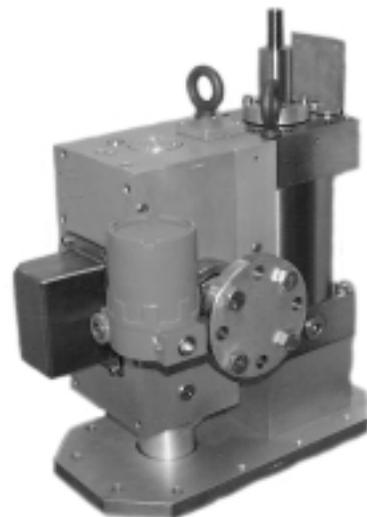
WEDGE TYPE GATE VALVE ACTUATORS



FURNACE DAMPER ACTUATORS



STEAM THROTTLE VALVE CONTROLS
For STEAM TURBINES



BAFCO

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Dependability by Experience