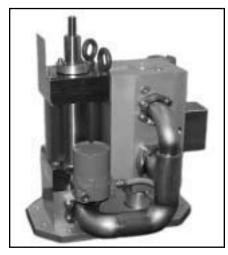
# BAFCO

**MODEL 701** 

## STEAM THROTTLE VALVE CONTROLS for STEAM TURBINES





#### **MAXIMIZE PERFORMANCE and PROFITS**

of your steam turbine and electronic governor!

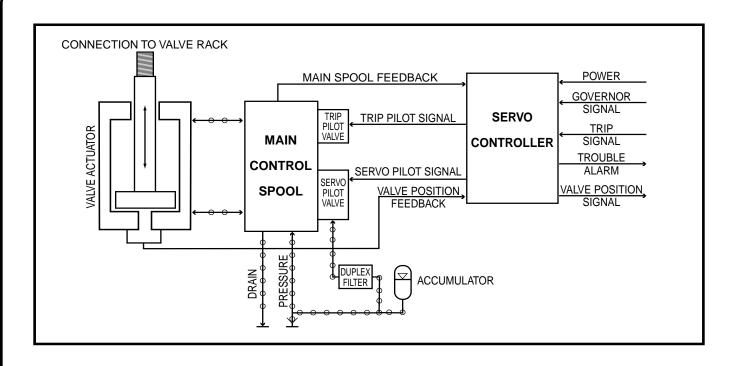
Install BAFCO Model 701 electro-hydraulic steam throttle valve actuators, servovalve, servoampilifier and trip systems to precisely position the steam valves.

BAFCO .... The premier electro-hydraulic valve actuator and control system manufacturer for CRITICAL PROCESS CONTROL for the worldwide petrochemical industry for over 40 years! From Catalytic Cracking Units to High Pressure Polyethylene Reactors to Rocket Engine Test Facilities, users know they can depend on BAFCO!

#### **BAFCO MODEL 701 STEAM THROTTLE VALVE SYSTEMS include:**

- high response linear hydraulic actuator
- LVDT for position feedback
- \* servoamplifier mounted in NEMA-4X control box
- receives 4-20 ma output from ANY electronic governor
- 2 or 3 stage servovalve and trip manifold
- electro-hydraulic trip controls for high speed trip
- duplex filtration for most sensitive components
- outputs for monitor and alarm
- adaptors for turbine shell or floor mounting

**Bulletin STVC** 



#### STANDARD SYSTEM FEATURES:

- · Output shaft
- · Thrust output
- · Stroke length
- · Speed (Throttling)
- · Speed (Trip)
- · Input signals throttling
- · Solenoid valve (trip)
- Linearity
- · Hysteresis
- · Repeatability
- · Response level
- Resolution
- · Power source electrical
- · Electrical classification
- · Power source hydraulic
- · Filtration
- · Flow requirements quiescent
- · Ambient temperature
- · Materials of construction
  - · Manifolds
  - · Cylinder/cylinder heads
  - · Piston stem

#### **OPTIONAL SYSTEM FEATURES:**

- · Manual control station
- · Output shaft

extends to open steam throttle valve 2,500 to 25,000 lbs.

1" to 12"

< 2.50 sec. - others available

< .400 sec. - others available

4-20 ma - others available

24 vdc - others available

< 1%

< .5%

< .2%

< **0.03** ma

< .1%

24 vdc, 110 vac, 220 vac,

NEC Class 1, Div. 2 & Cenelec

90 to 300 psi

10 micron nominal

2 gpm at 100 psi

-15° to +150°F

aircraft grade aluminum - anodized

carbon steel - nickel plated

stainless steel

electric pushbutton control

retracts to open steam throttle valve

#### **SERVOAMPLIFIER BOX**

- · NEMA-4X enclosure
- · Servoamplifier
- Dual power supplies
- · Terminal strips
- · Dual digital readouts
  - · Shaft position
  - · Governor Signal
- LED power supply
- · LED fault indicators
  - · Loss of command signal
  - · Loss of power supply
  - · Loss of feedback signal
  - · Loss of coil



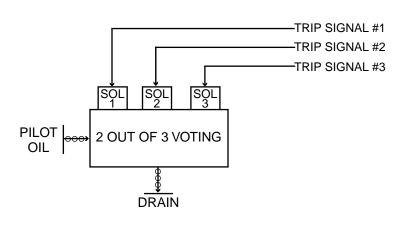
#### TRIPLE REDUNDANT TRIP MANIFOLD

- · 2 out of 3 solenoid tripping logic
- · Solenoids can be changed on the fly
- · Solenoids rated NEC Class 1, Div. 1 & Cenelec
- · De-energize solenoid to trip
- · Trip voltages 24 vdc, 110/220 vac
- · Auto reset on restoration of power
- · Dual trip cartridges for increased reliability
- Anodized aluminum manifold
- · Multiple 1" inlet & drain connections
- Hydraulic pressure gage connection
- · Outputs for monitor & alarm

#### **OPTIONAL FEATURES**

- Manual trip
- · Other solenoid voltages available





BAFCO, INC. P.O. BOX 2428, 717 MEARNS ROAD, WARMINISTER, PA 18974 USA

## OTHER BAFCO PRODUCTS

SLIDE & PLUG VALVE ACTUATORS
For FCC Refineries



BUTTERFLY VALVE ACTUATORS
For Expander Turbines



FREQUENCY RESPONSE ANALYZERS



**CENTRAL HYDRAULIC SYSTEMS** 



**FURNACE DAMPER ACTUATORS** 



FIELD MANIFOLDS



### **ADDITIONAL PRODUCTS BY BAFCO**

- INLET GUIDE VANE ACTUATORS & CONTROLS FOR LARGER AXIAL COMPRESSORS -

- HIGH PRESSURE SOCKET WELD TUBING & PIPE FITTINGS per SAE CODE 61 -