## Electronic Actuator Drive

The CP-9301 and CP-9302 electronic actuator drives process a variable input signal from a controller to provide proportional control of an electric gear train actuator. The CP-9301 is preset at the factory for voltage input. The CP9302 is factory preset for current input and has additional wiring for connection to an override switch, for those applications requiring an external override of the input signal. These drives are equipped with built-in jumpers and adjustable potentiometers, so that the type of input signal, deadband, input span, and start point may be reset in the field when necessary.

Features:

- Mounts directly onto Invensys proportional, electric, gear train actuators.
- Power is supplied directly from the actuator.
- Jumpers for selecting either voltage or current input, as well as $3 \%$
 or 5\% deadband.
- Adjustable span and start point potentiometers.


## Model Chart

| Part Number | Input Signal Override | Factory Jumper Settings |  |  |  | Jumper Settings |  | Potentiometer Adjustment Ranges |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Input <br> Signal | Deadband | Start Point | Input Span | Input Signal | Deadband | Input Span | Start Point |
| CP-9301 | Not Available | Voltage ( 6 to 9 Vdc ) | $3 \%$ of InputSpan | 6 Vdc | 3 Vdc | Voltage or Current | $3 \%$ or $5 \%$ of Input Span | 3.0 to 16.5 <br> Vdc or 8 to <br> 16 mAdc | $\begin{gathered} 0 \text { to } 10 \mathrm{Vdc} \\ \text { or } 2 \text { to } 16 \\ \text { mAdc } \end{gathered}$ |
| CP-9301-456 |  | Voltage <br> (0 to 10 Vdc) |  | 0 Vdc | 10 Vdc |  |  |  |  |
| CP-9302 | Available | Current |  |  |  |  |  |  |  |
| CP-9302-702 | (Use is Optional) | $\begin{aligned} & \text { (4 to } 20 \\ & \text { mAdc) } \end{aligned}$ | $5 \%$ of Input Span | 4 mAdc | 16 mAdc |  |  |  |  |

## Typical Actuators.

| Actuator Series | Power |  | Torque |  | Stroke Degrees | Spring Return | Internal Transformer ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Vac } \\ 60 \mathrm{~Hz} \end{gathered}$ | Amp | Lb-in. | N-m |  |  |  |
| MP-2113-500 | 24 | 2.2 | 50 | 5.6 | 180 | - | No |
| MP-361 | 24 | 2.5 | 50 | 5.6 | 180 | CW | No |
| MP-371 | 24 | 2.5 | 50 | 5.6 | 180 | CCW | No |
| MP-381 | 24 | 2.5 | 220 | 24.9 | 180 | - | No |
| MP-9713 | 24 | 4.0 | 800 | 90.3 | 180 | - | No |
| MP-465 | 120 | 0.5 | 50 | 5.6 | 180 | CW | Yes |
| MP-475 | 120 | 0.5 | 50 | 5.6 | 180 | CCW | No |
| MP-483 | 120 | 0.5 | 220 | 24.9 | 90 | - | Yes |
| MP-485 | 120 | 0.5 | 220 | 24.9 | 180 | - | Yes |
| MP-495 | 120 | 0.95 | 450 | 50.8 | 180 | - | Yes |
| MP-9750 | 120 | 0.9 | 800 | 90.3 | 180 | - | Yes |
| MP-4651 | 240 | 0.25 | 50 | 5.6 | 180 | CW | Yes |
| MP-4851 | 240 | 0.25 | 220 | 24.9 | 180 | - | Yes |

a Units with a "-2" suffix, e.g. MP-xxxx-xxx-2-x, include a built-in transformer (used for Microtherm ${ }^{\circledR}$ or with AE-504) with secondary leads wired externally to terminals 7 (Blue, 12 Vac) and 8 (Red, 24 Vac ) of the actuator.
Caution: When using the CP-9301 or CP-9302 with actuators containing an internal transformer, disconnect and tape off the red and blue leads before installing and powering the device. Failure to do so can result in damage to the actuator drive
Note: Models prior to "-2" suffix had transformer wired directly to potentiometer. To disconnect the transformer, remove the back plate of the actuator, then disconnect and tape the transformer leads.

