

# GPS Actuator

By Bernard Controls

## The best way to find your electric actuation solution

- **Resolution**
  - **The resolution is the smallest achievable step at the output shaft of the electric actuator.**
  - **This is the** most important performance criterion to ensure efficient modulating **since it refers to the** ability of the actuator to promptly operate the valve by little steps.
  - **Practically, if we have a minimum output change - resolution - equals to 2%, then:**
    - 2% means 2% of the total travel of the valve.
    - Therefore, a resolution of 2% allows the actuator to reach 50 steps along the total travel. Similarly a resolution of 1% would allow the actuator to reach 100 steps along the total travel.
    - For a Quarter-turn actuator:  $2\% \text{ of } 90^\circ = 1,8^\circ$  (minimum output change would be a rotation of  $1,8^\circ$ )