Throttle Actuator Stand with Remote Pendant

The **Throttle Actuator** consists of a completely enclosed DC motor combined with a planetary gear reduction and optical encoder. The integral planetary gear reduction provides ample torque for actuating the most demanding mechanical throttle systems while the optical encoder provides precise position feedback for optimum control. Combined with Dyne Systems’ closed-loop throttle controls, the Throttle Actuator provides precise, repeatable control for position, speed and load modes.

The **Actuator Stand** works in conjunction with our **Actuator Base Plate** to give a convenient mounting location for the actuator and includes an adjustable anchor point (L Bracket) for the throttle cable. The Actuator Stand allows for all cabling to be internal with an exit port at the bottom. Cables come in variable lengths, terminated or non-terminated, and with or without Sealight depending on the needs.

The **Remote Pendant** is the recommended component to calibrate any of our stand alone throttle systems. This allows the dynamometer technician to make adjustments to the throttle in close proximity to the device under test. The standard remote includes a 60 in. (1,524 mm) cable in Sealight that is terminated to a MS connector and also includes a hanging handle which allows it to be conveniently located on the Actuator Stand.
Features

• Totally enclosed gear head DC motor and optical encoder
• Actuator assembly is wash down waterproof, drip proof
• Foot mount or “C face” mounting capability
• A 5 in. (127 mm) lever arm with adjustable rod end assembly is supplied for throttle linkage connection
• All cabling is internal with an exit port at the bottom of the stand
• Base plate includes an adjustable anchor point for the throttle cable
• Multiple cable assemblies are available (lengths, terminated or non-terminated, and with or without Sealtight)
• Remote Pendent for calibration
• UP and DOWN push-button to duplicate the functions of increasing or decreasing throttle position
• An ENTER push-button to allow entry of new calibration points
• A SOFT SHUTDOWN push-button
• LED indicators of UPPER LIMIT mode, LOWER LIMIT mode, limit acceptance, and FAULT

Specifications

Throttle stroke range: 0.5 x 4 in. (13 x 102 mm)
Maximum slew rate: 140 deg/sec < 120 lb-in (21 N-mm) opposing torque
Maximum operating torque: 120 lb-in (21 N-mm)
Maximum available short-term stall torque: 400 lb-in
Encoder senses position: +/- 0.005% FS

Dimensions (H x W x L)
• Actuator: 8 x 4 x 4 in. (203 x 102 x 102 mm)
• Pendant: 9 x 5 x 4 in. (229 x 127 x 102 mm)
• Actuator Stand with Actuator Base Plate: 43.78 x 18 x 18 in. (1,112 x 457 x 457 mm)

Control Power
• +/-20 V, 3.0 Amps

Environmental Limits
• Air Temperature: 0° to 104°F (0 to 40°C)
• Relative Humidity: 0 to 95%
• No condensation allowed