

STEERING CONTROL WHEEL (TILLER)

Description

Kavlico's Steering Control Wheel (Tiller) provides all the necessary elements for control, while providing signal indication via an internal RVDT. Our SHW unit meets the small envelope, minimum weight, and high reliability demanded by the aerospace industry. The design of the SHW unit contains many features common to Kavlico's overall line of pilot control products, whose reliability and durability have been verified through extensive qualification testing.



Operation of the steering handwheel downwardly actuates a single pole, double throw switch signaling that the handwheel is activated. A combination of this signal & the RVDT output is used to steer the nose landing gear left or right, during take off, landing and taxi.

Extensive use of lightweight non-metallic materials for the handle, cover, and body are used to keep the overall weight of the unit to a minimum.

Viscous damping is used in the design to control the rate of return of free handle to prevent any abrupt motion of the nose wheel on the ground.

An ergonomic, easy-to-use segment wheel has been installed per FAA 25 regulations. Both the RVDT and micro-switches receive power through a MIL-DTL-38999 connector.

The combination of fixed internal drive gear connected to an antibacklash gear on the RVDT provides a high accuracy signal proportional to lever travel.

Features

- Contains Kavlico designed & manufactured RVDT (number of channels specified by customer)
- Smooth return to cetner damper (rate is specified by customer)
- Design meets FAR Part 25 and RTCA/DO-160
- 25,000 flight hours MTBF
- Simple 4-screw mount permits rapid line replacement
- Painted to customer specification





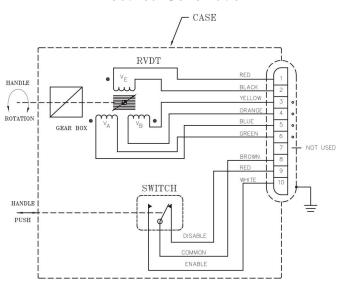
Typical Operating Force (Turning) (Adjustable to Customer Need)	2.3 to 6.7 lbs. (10 to 30N)
Mechanical Travel	±80 degrees
Wheel	Lightweight Semi-gloss black 27038 per Fed-Std 595
Activation Switch	Gold plated, sealed
Electrical Receptacle	MIL-DTL-D38999 Connectors/20FB35PN
Color Scheme (Customer Specified)	Cover and housing Fed-Std 595, color 36231 (lusterless gray)
Weight	2.41bs (1.1 Kg.) Max.



Mounting Cut Out Dimensions

5.155 [130.94] 2x 2.953 [75.01] 2x 1.119 [28.42] 2x .439 [11.15] 2x .439 [11.15] 2x 4.669 [118.59]

Electrical Schematic



Page 2

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