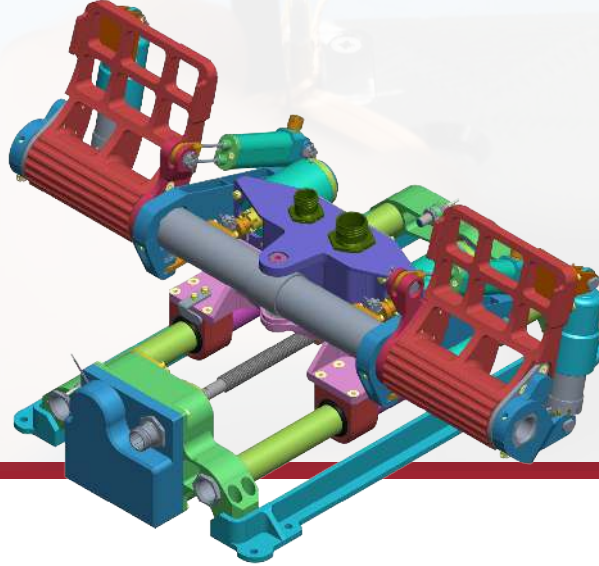


HRP101-0000-00

RUDDER PEDAL



APPLICATIONS

Developed for use in the jet trainer's fly-by-wire flight control system, the Rudder Pedal equipment converts pilot commands into input signals to the rudder function, brake function and nose gear steering function.

This equipment also has mechanisms that provide artificial feeling to the pilot while performing the rudder, braking and steering functions.

An electromechanical actuator that adjusts the pedal distance to ensure comfortable use by pilots of varying heights is also part of the Rudder Pedal equipment.



Fixed-Wing Aircraft

STANDARDS

MIL-STD-810G
DO-254

KEY FEATURES

- > Redundant architecture tailored with aircraft systems
- > Customized artificial feeling
- > Lightweight structure
- > Customized for HMI Considerations

Technical Specifications			Specification	Unit	Value
Specification	Unit	Value	Rudder Backlash	inch	±0.02
Rudder Pedal Travel	inch	+/-0.5 ±0.1	Adjustment Operation Time	sec	<8
Brake Pedal Travel Angle	deg	17	Weight	kg	<12
Adjustment (For FWD/AFT Direction)	inch	4.0			

Electromagnetic Specification		
Low Pressure (Altitude)		Altitude (25000 ft) Decompression (8000 - 45000 ft) Overpressure (170 kPa)
Temperature Shock		Procedure I-C -15°C / +55°C
Contamination by Fluids		Procedure I (Cleaning Fluids)
Rain (This test is not applicable to hermetically sealed equipment)		Procedure III
Humidity	MIL-STD-810G	Procedure II - Aggravated Cycle (60°C/10 Cycles)
Fungus		Method 508.7 Fungus
Salt Fog		Method 509.6 Salt Fog
Sand and Dust		Procedure I**This test is not applicable the equipment which is in closed areas.
Acceleration		Refer to Section 4.2.13.2.1
Vibration		Procedure I - Category 12
Acoustic Noise		Procedure I, 120 dB
Shock		Procedure I & Procedure V
High Temperature		Ground Survival High Temperature Test & Short Time Operating High Temperature Test (+85°C / +71°C)
Low Temperature	RTCA DO-160	Operating Low Temperature Test (-40°C)
Power Input	RTCA DO-160G	Category Z
CS101		Conducted Susceptibility, Power Leads, 30 Hz to 150 kHz
CE102		Conducted emissions, power leads, 10 kHz to 10 MHz
CS115	MIL-STD-461F	Conducted Susceptibility, bulk cable injection, impulse excitation
CS116		Conducted Susceptibility, damped sinusoidal transient, cables and power leads, 10 kHz to 1
RE102		RE102, radiated emissions, electric field, 10 kHz to 18 GHz.
Lightning Induced Transient Susceptibility	RTCA DO-160G Section 22	A4G4L4 (unshielded cables) A4J4L4 (shielded cables)
Radio Frequency Susceptibility	RTCA DO-160G Section 20	Radio Frequency Susceptibility (Conducted) Cat Y Radio Frequency Susceptibility (Radiated) Cat G
Electrostatic Discharge (ESD) Susceptibility	RTCA DO-160G Section 25	Radio Frequency Susceptibility (Radiated) Cat A