

FUEL LEVEL INDICATOR WITH AND WITHOUT DISPLAY SELECTION

Intended purpose

The fuel level indicator with/without display selection forms part of the functional equipment of the cockpit. Its purpose is to display the amount of fuel left in the aircraft to the pilot.

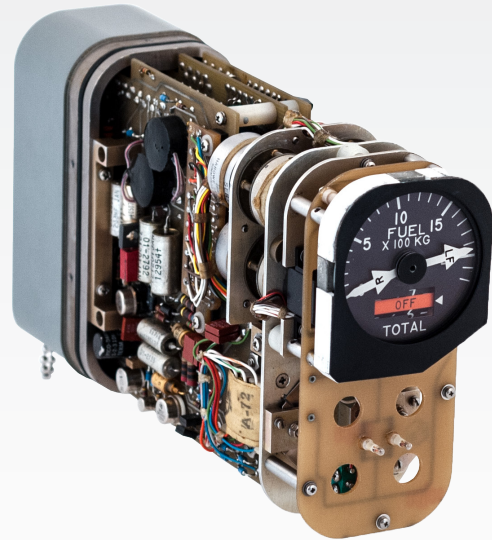
Configuration of the device and technical functionality

The hermetically sealed device is filled with a nitrogen-helium mix and consists of a counter mechanism and drive, the electronic unit which is equipped with two circuit boards, and the backshell. Its purpose is the continuous display of the fuel volume in the aircraft. In this respect, the purpose of the counter mechanism is to display the fuel levels of all tanks, while the display systems show the fuel levels of the individual tanks or tank groups.

The control circuit of the display unit which encompasses the signal amplifier, the voltage amplifier, the signal converter, the control amplifier and the setting mechanism is based on a comparison of empty and/or full tanks. The empty comparison occurs on the inverted input of the signal amplifier through the compensation of the signal current. The full comparison occurs by changing the output voltage of the voltage amplifier.

Services provided by AUTOFLUG

- Maintenance (for example, buttons for selecting the fuel level display, buttons for the test switch, lubrication of bearings, subsequent surface treatment)
- Repair (possible replacement of drop warning sign OFF, replacement of the buttons, the fuel level indicator, the counter mechanism drum or the actuator, improvement of damage to paint)
- Tests (for example, of the dial lighting or the color temperature, the leak test, the insulation resistance, the calibration)
- Conservation
- Planning and purchasing of spare parts
- Obsolescence management



The display selection is completed with the use of the level indicator selection button on the front of the device. The device also serves as a mother unit for a downstream fuel level indicator and as an encoder for a visual display unit and remote display system.

The verification of the device requires the availability of a variety of different testing instruments, including:

- Precision variable capacitor
- Digital voltmeter
- Helium leak testing instrument / insulation testing instrument
- Multimeter
- Oscilloscope
- Vacuum furnace
- Photometer