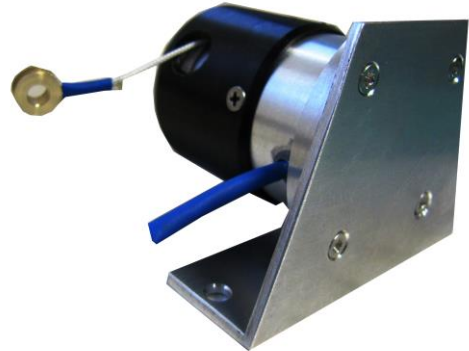


LX Flaps sensor

PN: FLS-P-30



Electronic device



Sensor device

1 General description

The unit is capable to detect longitudinal movement of the flaps lever command rod. The device, which converts longitudinal movement into an electrical signal, is a high quality wire-wound multiturn potentiometer. A spring based self-retracting system returns the cord in case of backward movement of the flap lever rod. The high quality cord allows control rod movement of up to 300 mm, which enables the unit to be used for all gliders currently available. From the position of installation, only two wires are used to connect to the electronic device (LXCANAD), which converts resistance data into digital signal. The electronic device is a part of CAN system bus.

Mechanical layout of sensor device:

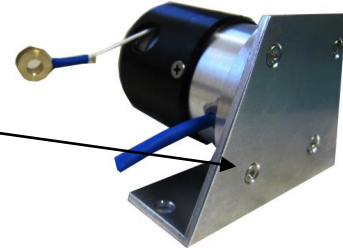
- Diameter 38 mm
- Width 49 mm
- Cord maximal move 300 mm

Electronic interface:

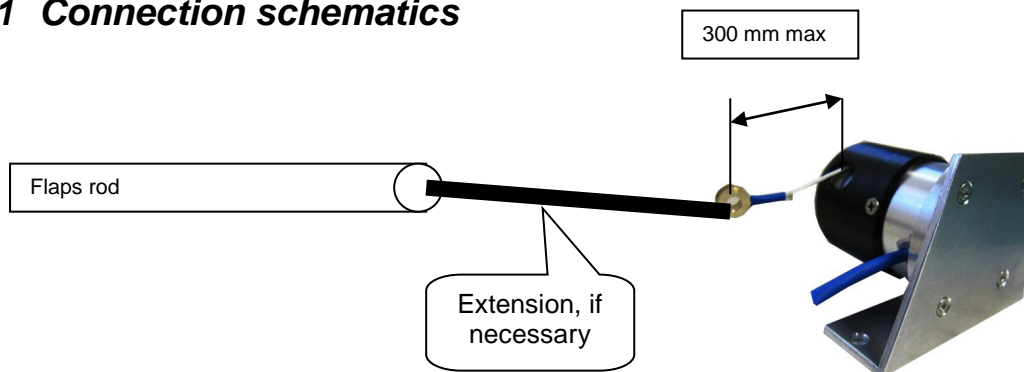
- 34 x 27 x 18 mm
- 2x CAN bus connectors (8P). Plug-and-fly. No soldering required
- 4x analogue inputs (for brakes, undercarriage..)
- compatible to LX Zeus and LX Eos Sytem bus
- Easy calibration via user interface of LX Zeus or LX Eos
- stand alone solution with LX NAVBOX as indicator

2 Installation of sensor device

The device should be installed on a position, which allows as much as possible parallel movement of the cord. An angled support makes possible to fix the device to the aircraft structure by screws. The support can be rotated 360 degrees after release of 4 screws. In case that the sensor device position is too far from the rod and 300 mm of move will be exceeded an extension cord should be used. Sensor device comes with one two pole connector which makes possible to reinstall the unit after installation and 3 m cable. One end of the cable is equipped with two pole connector and Another side is open and prepared to be connected to CANAD.



2.1 Connection schematics



Connection schematics

3 Installation of electronic interface (LX CANAD)

The unit usual position is close to the LX Zeus or LX Eos. As the unit a CAN bus participant both 8P plugs should be occupied with CAN cables. CAN units should use so called "daisy chain" solution. In case that Flaps electronic device is the last device of the chain only one connector is occupied. See appendix.

3.1 Connection of Flaps sensor

Connection of Flaps sensor and the interface is realized via two wires which are coming from sensor device and are connected to LX CANAD terminals. The device is capable to accept up to 4 sensors. Polarity of wires coming from Sensor device doesn't matter.

INPUT	PIN	Connector
1	1,2	J2
2	3,4	J2
3	1,2	J5
4	3,4	J5



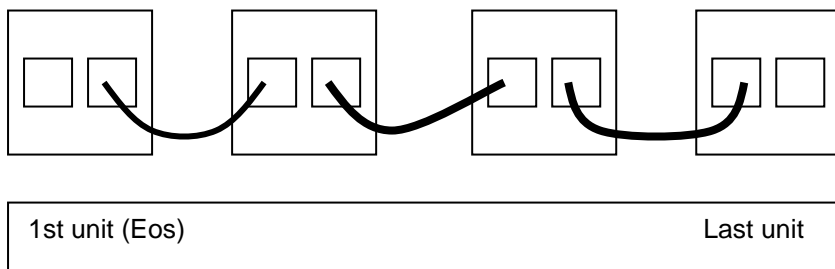
3.2 Calibration Process


- see LX Zeus or LX Eos manual

4 Appendix

Daisy Chain principle:

Use CAN marked cables (8P/(P telephone type)



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