Product Overview

The AX-LS-FL-xx is a range of Liquid Level Float switches designed for multi level applications with access from the surface or where multi-level sensing is required from a single penetration. The unit consists of a float which is suspended from a weighted cable, as the liquid levels change, the float follows the surface level at the same time tilting due to its weighted restraint, inside the float are a number of microswitches which trigger as the float tips. Suitable for a wide range of liquids.

Features

- Easy Installation
- Standard 5m cable length (10m option)
- Alarm, filling, emptying and combined variants
- Suitable for a wide range of liquids

Product Specifications

Standard cable length: 5 metres (Option 10M)
Standard adjustment range: 250 to 1200mm (other ranges available at additional cost)
Pressure rating: 200Kpa
Switching Element: Microswitch
Contact Ratings: Float Polypropylene
                   Cable PVC standard (option polyurethane, rubber or teflon at additional cost)
                   2LHEN Oil Resistant TPU
Min fluid specific gravity: 0.7
Bouyancy: 6 N (600g)
Protection Class: IP67
Ambient Temperature Range: 0 to + 55 deg C
Country of Origin: Finland

Order Codes:

AX-LS-FL-1L Low level alarm
AX-LS-FL-1H High level alarm
AX-LS-FL-2L Filling pump control
AX-LS-FL-2H Emptying pump control
AX-LS-FL-2LH High & low level alarm
AX-LS-FL-3L Filling pump control & low level alarm or dual filling pump control
AX-LS-FL-3H Emptying pump control & high level alarm or dual emptying pump control
AX-LS-FL-4L Filling pump control & high & low level alarm
AX-LS-FL-4H Emptying pump control & high & low level alarm
AX-LS-FL-4LSE Dual pump filling control & low level alarm
AX-LS-FL-4HSE Dual pump emptying control & high level alarm
AX-LS-FL-2LHEN High & low level alarm for oil tanks
-10 10m Cable length
Installation

The Float level switches should only be installed by a competent technician who has been trained and is experienced in installation with hazardous voltages. (>50Vac & < 1000Vac or >75Vdc & <1500Vdc).

1/ Ensure that all power is disconnected before carrying out any work on the float switches.

AX-LS-FL-1L and AX-LS-FL-1H

The above units are supplied with a two part mounting bracket so that the cable can be secured to the top edge of the tank. The mounting consists of a plastic tube with a single hole fixing bracket with a tubular plastic insert which slips inside when you have the correct position lock the cable in position. Hang the float so that the required switching point is 12.5cms below the desired switching point. No weight is required. You may need to carry out final adjustments under actual pumping conditions.

AX-LS-FL-1L

AX-LS-FL-1H

All the other Float Level Switches

The remainder of the range are supplied with a weight. The switching height differential is adjusted by moving the weight along the cable. The differential is on minimum, when the weight is nearest to the float.

Dimensions:

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Switching Height Differential in relationship to the weight of the float

Curve B shows the switching height differential in relationship to distance of the weight from the float.
Curve C shows the equivalent differential between starting and alarm levels.

For example: If the weight of model 3H is about 50cm from the bottom of the float (measure A) the start/stop differential is about 60cm and the start/alarm differential is about 25cm. The Differentials presented here are valid when standard PVC cable is used. Special cables may cause variations to these values.

HEIGHT FIXING

There are several methods that can be used to fasten the cable so that the float is positioned at the right level in the tank. The three most commonly used are illustrated below.