# ELS-R series

Rotary paddle Level-Limit-Sensor

Instruction Manual

Adpro-Instruments I td

# **General Safety /Warning Notes**

compatibility

Installation, maintenance and commissioning must be accomplished only by qualified technical personnel

The product must be used only in the manner outlined in this instruction manual. In the case of inexpert handling or handling malpractice, the safety of the device cannot be

For terminal connection of the device, the local regulations or VDE 0100 (Regulations of German electrotechnical rs) must be observed.

Switch off the supply voltage before opening the device.

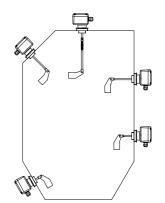
All field wirings must have insulation suitable for at least 250V AC. The temperature rating must be at least 90°C.

In the case of a defect, the distribution voltage must automatically be cut off by a RCCB protection switch so as to protect the user of the device from indirect contact with nerous voltage

A voltage-disconnecting switch must be provided near the

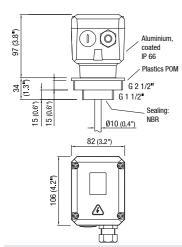
Materials of construction must be checked on their chemical

Level Limit Switch for monitoring of bulk goods. Applicable as full-, demand- and empty detector.

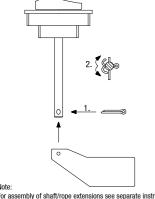


**Applications** 

# Technical data / Process specifications





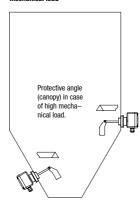


For assembly of shaft/rope extensions see separate instruction delivered with the extensions

## Rigid shaft Rope extension Pendulum shaft M20x1.5 230N 130±5 (5.1±0.2") (13.6") 1.4305 (SS303) 1.4301 (SS304) 35 speed of measuring 92 (3.6") vane: 1rpm max. 400N max. . 1500N Version with extension only permitted as full detector. Dimensions in mm (inch)

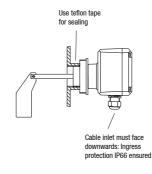
# Installation

Mechanical load



Version with extension only permitted as full detector

# Fixing / Sealing



Use suitable cable glands or conduit system. Not used entries have to be closed tight.

**Switching logic / Maintenance** 

# Adjustment of the spring force

Adjustment

-40°C (-40°F)

+ 80°C (176°F)

0.8 bar (11.6psi)

> 100 g/l (> 6 lb/ft<sup>e</sup>

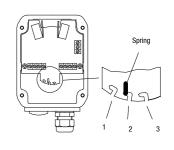
With temperatures below -25°C (-13°F) the motor start may

delay up to 1 min (detection of covered to uncovered).

-40°C (-40°F) .

< 50 mm (2")

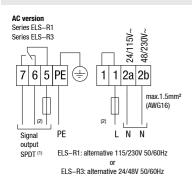
+50°C (122°F)



light: central: light material

universal very sticky material

# **Electrical connection**



Supply voltage ±10% (including 10% from EN 61010), max. 4VA

(1) max. 250V AC, 2A, 500W max, 300V DC, 2A, 60W (2) fuse max. 10A, HBC, 250V, fast or slow

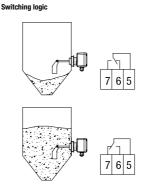
## DC version Series ELS-R2

1 2 6 5 PE (⋣) max.1.5mm (AWG16) (2) PE Signal 24V DC output SPDT (1)

Supply voltage  $\pm 10\%$  (including 10% from EN 61010), max. 2,5W

(1) max, 250V AC, 2A, 500W max. 300V DC, 2A, 60W

(2) fuse max. 10A, HBC, 250V, fast or slow



Normaly not required

# **EU - Declaration of Conformity**

Manufacturer Adpro-Instruments, Malta

Level Limit Sensor, Series ELS-R Туре

2014/35/EU Low Voltage Directive

Applied standards for evaluation of the unit: FN 61 010-1

2014/30/EU Electromagnetic compatibility

Applied standards for evaluation of the unit: EN 61 326

We hereby confirm, that the above-mentioned unit corresponds with the essential safety targets, which are fixed in the above mentioned directives.

Name Date: Unterschrift / Sign

Dipl. Ing. (FH) A. Haug, Head of Engineering 07/2016 A. Ham