



PKP Process Instruments Inc.

10 Brent Drive

Hudson, MA 01749

Tel: +1-978-212-0006

Fax: +1-978-568-0060

PKP Prozessmesstechnik GmbH

Borsigstrasse 24

D-65205 Wiesbaden-Nordenstadt

Tel: 06122 / 7055 - 0

Fax: 06122 / 7055 - 50

Operating Instructions

FS00

Float Level Switch

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1 Introduction

Series FS00 float level switches are noted for their reliable function and easy operation. To obtain the greatest benefit from this device, please observe the following cautionary statement: **Persons who are responsible for setting up or operating this device must be sure to read the and understand the operating instructions and the safety information pertaining to it.**

2 Safety Information

2.1 General Instructions

To ensure safe operation, the device must only be operated according to the information in the operating instructions. When the device is in use, the regulations and safety standards applicable to the specific application must also be observed. This statement also applies to the use of accessories.

2.2 Proper Usage

Series FS00 float level switches are used for monitor the level of liquid media. Any application extending beyond this specific intended use does not constitute proper usage. Series FS00 float level switches must not be employed as the sole means of avoiding hazardous conditions in machinery and installations. The machinery and installations must be designed in such a manner that faulty conditions and malfunctions will not present hazardous situations for operating personnel.

2.3 Qualified Personnel

Series FS00 float level switches must only be used by qualified, knowledgeable personnel trained in correct use of these devices. Qualified personnel are those persons familiar with setting up and assembling these devices, placing them in service and operating them. In addition, such personnel must also be qualified to perform the work associated with the application for which the device is being used.

3 Functional Description

The FS00 float switch functions according to the general principle describing the buoyancy of floating bodies. A hollow float is raised by the rising liquid until it reaches an angle of 45° from horizontal, where a switching action takes place. The FS00 consists of a float made of polypropylene with a water-proof, position-dependent electromechanical microswitch. The floats in this series are fitted with cables made of various materials and of varying lengths.

4 Installation

The switch can be attached with screws to the side of a container. In the case of an open container, it can be suspended in the container from above. The switching point can be set by moving the optional weights.

5 Electrical Connection, Connection Cable, Dimensions

For information on these specifications, see the data sheet in the appendix to this description.

FS00

Float Level Switch

- low cost version
- simple installation
- vertical or horizontal mounting
- high switch rating, 10 (8) A, 250 VAC
- N/O, N/C or SPDT versions available
- different cable materials, depend on medium



Description:

The float level switches FS00 work according to the lift principle.

A hollow float is raised by the rising liquid until it reaches an angle of 45 ° from horizontal when switching takes place. The mercury free float switch can be mounted to the tank or container via a through hole such as a 1/2" cable gland or from the tank top.

The switch point is defined by manipulating placement of an optional ballast weight on the connecting cable or by inserting cable through a tube of the desired length.

The FS00 level switch consists of a polypropylene housing with an integrated watertight and position dependent electromechanical microswitch. Cable connections from different materials and in different lengths may be chosen to suit the medium and tank dimensions.

Applications:

The FS00 float level switches are compatible to virtually all liquid media which do not affect the materials of the switch or cable. The unit is absolutely independent from the pollution of the medium.

The FS00 may be used as MIN, MAX monitor, to control valves or pumps or as an alarm switch.

Materials and contact ratings

Materials: housing from PP, mirror welded, capnut PG11 from PA
connection cable according to ordering code

Contact function

based on rising level

- FS00.S... N/O, 10 (8) A, 250 VAC
colour: red
- FS00.O... N/C, 10 (8) A, 250 VAC
colour: yellow
- FS00.W... SPDT, 6 (4) A, 250 VAC
colour: orange

Connection cable

3-wire for N/O and N/C versions, 4-wire for SPDT

Cable material:

- Neoprene black
standard cable for general use
- Polyurethane yellow
for mineral oil and gasoline
- LAPP-Therm olive
for bio oil and grease and chemicals
- special cable material
upon request

Electrical connection

- FS00.S... brown = common
blue = signal, switched through with full tank
green / yellow = protective ground
- FS00.O... brown = common
blue = signal, switched through with empty tank
green / yellow = protective ground
- FS00.W... brown = common
blue = signal, switched through with full tank
black = signal, switched through with empty tank
green / yellow = protective ground

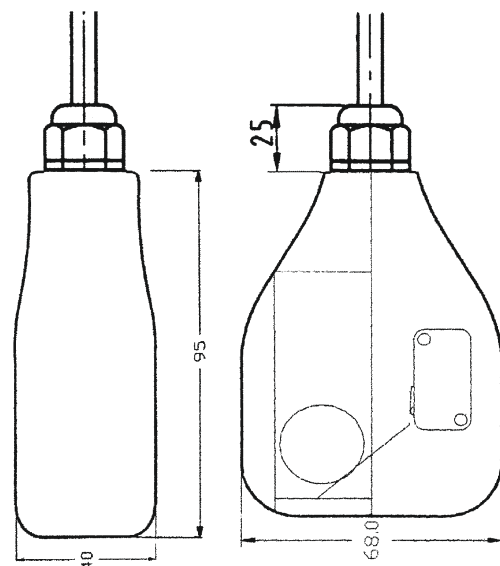
Ballastweight

Material: cast iron, plastic coated (Levasit)
Dimensions: 30x30x190 mm

Ordering code:

Order number:	FS00.	S.	N.	5.	1.	0
Float level switch						
Contact function						
S = N/O						
O = N/C						
W = SPDT						
Cable material						
N = Neoprene						
P = polyurethane						
L = LAPP-Therm						
S = special material						
cable length						
5 = 5 m						
10 = 10 m						
20 = 20 m						
99 = other length						
Ballast weight						
0 = without						
1 = with						
Options						
0 = without						
9 = please specify						

Dimensions



Specifications

- Operating temperature:** max. 140 °F / 60 °C, with LAPP-Therm cable up to 200 °F / 95 °C
- Storage temperature:** max. 200 °F / 95 °C
- max. pressure:** 29 psi / 2 bar
- Switching angle:** +/- 45°
- Electrical protection:** IP68
- Weight:**
- Float:** 0.24 lbs / 110 g
 - Ballast:** approx. 1.54 lbs / 700 g