

# LEVEL & LEAK DETECTION



## FLOAT SWITCH KCFS SERIES

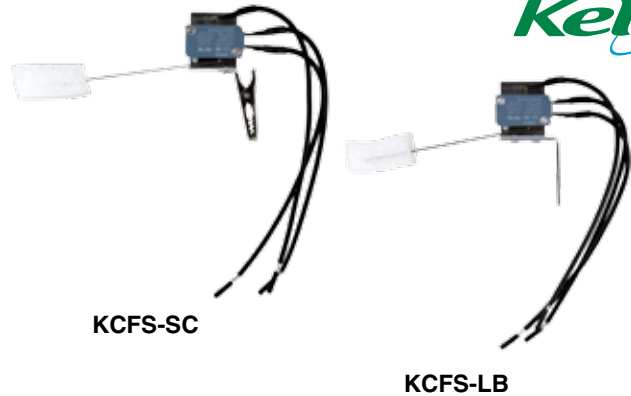


### DESCRIPTION

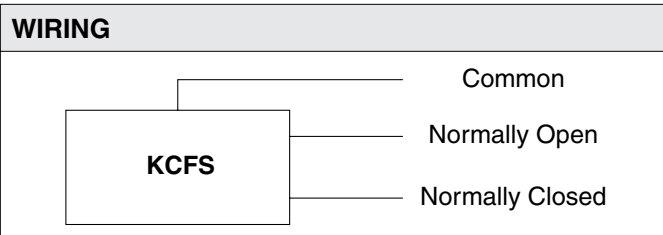
The **Kele KCFS Series float switches** provide a cost effective solution for applications such as condensate drip pan monitoring. The **KCFS-SC** features a spring clip and the **KCFS-LB** an L bracket for mounting.

### FEATURES

- *Simple installation*
- *Low cost*
- *SPDT contacts*



SPECIFICATIONS			
<b>Switch</b>	5A @ 125 VAC 3A @ 250 VAC	<b>Dimensions</b>	3.5" (8.9 cm) clip to float
<b>Operating Temperature</b>	Maximum 150°F (70°C)	<b>Wiring Terminations</b>	6" (15 cm) leads 18 AWG
<b>Mounting Orientation</b>	Horizontal	<b>Warranty</b>	1 year



**ORDERING INFORMATION**

MODEL	DESCRIPTION
<b>KCFS-LB</b>	Float switch with L bracket mount
<b>KCFS-SC</b>	Float switch with spring clip mount

### DESCRIPTION

The **Innovative Solutions MLS Series multi-level switch** can be customized to meet application requirements. The unit can be configured with up to four independent switch points and stem lengths up to 48" (122 cm). The **MLS Series** is mounted vertically and shipped in the normally open position. For normally closed operation, simply invert the float.

### FEATURES

- *Up to four independent switch points*
- *50 VA SPST switch operation (120-240 VAC)*
- *Easy installation*
- *Hermetically sealed*

## MULTI-LEVEL SWITCH MLS SERIES



MLS



SPECIFICATIONS			
<b>Operating Pressure</b>		<b>Switch Rating</b>	50 VA SPST @ 120 VAC
<b>Stainless steel:</b>	120 psig (8.3 bar)	<b>Wetted Materials</b>	Brass stem, Buna-N float, 316 SS stem, Buna-N float, 316 SS stem, 316 SS float
<b>Buna-N:</b>	150 psig (10.3 bar)	<b>Mounting Orientation</b>	Vertical (± 30°)
<b>Specific Gravity</b>		<b>Process Connection</b>	1/2" NPT(M), 1" NPT(M)
<b>Stainless Steel</b>	0.85	<b>Dimensions</b>	Up to 48" L x 1.0" diameter
<b>Buna-N</b>	0.65	<b>Approvals</b>	UL File E203716
<b>Operating Temperature</b>		<b>Warranty</b>	1 year
<b>Stainless steel</b>	-40° to 300°F (-40° to 149°C)		
<b>Buna-N</b>	-40° to 180°F (-40° to 82°C)		



# LEVEL & LEAK DETECTION

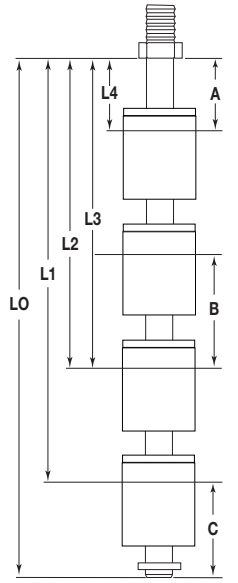
## MULTI-LEVEL SWITCH MLS SERIES

### MLS ACTUATION LEVELS

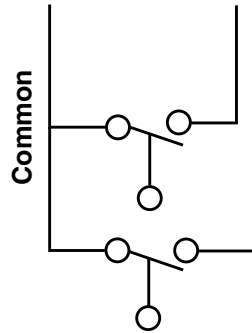
- A = Minimum distance from actuation point to bottom of mounting.
- B = Minimum distance between actuation levels.
- C = Minimum distance from end of unit to lowest actuation point.

#### Notes:

1. A, B, and C dimensions are based on a specific gravity of 1.0.
2. Minimum distances
  - A= 1" (2.5 cm)
  - B= 1.75" (4.4 cm)
  - C= 1" (2.5 cm)
3. Actuation levels are calibrated on descending fluid level, with water as the fluid, unless otherwise specified.
4. Standard tolerance on actuation levels is  $\pm 1/8"$  (3mm).



### SWITCH WIRING



Wiring Options	Wire Color
Common Wire	Black
	NO or NC
L1	Red
L2	Yellow
L3	Blue
L4	Brown
L5	Orange

**Notes:** All SPST switches are set normally open in their "dry", "no level" condition unless specified otherwise. "White-Red" and "White-Yellow" denote single white wire with red or yellow stripes.

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LEVEL & LEAK DETECTION

### FLOAT SIZES AND OPERATING SPECIFICATIONS

Float Materials	Dimensions	Temperature	Pressure	Minimum Specific Gravity
316 stainless steel	1" x 1"	-40° to +300° F	300 psig	0.95
Buna-N	1" x 1"	-40° to +180° F	150 psig	0.80

### ORDERING INFORMATION

MODEL	DESCRIPTION
MLS	Multi-level switch
<b>STEM &amp; FLOAT MATERIALS</b>	
1	Brass stem/Buna-N float
2	316 Stainless stem/Buna-N float
3	316 Stainless stem/316 Stainless float
<b>MOUNTING TYPE</b>	
05	1/2" NPT
10	1" NPT
<b>OVERALL LENGTH</b>	
LO	Total length in inches, (maximum 48", minimum is L1 + 1")
<b>ACTUATION LEVELS</b>	
L1	First float switch point. Specify in (inches)
L2	Second float switch point. Specify in (inches), blank if none
L3	Third float switch point. Specify in (inches), blank if none
L4	Fourth float switch point. Specify in (inches), blank if none
<b>ENCLOSURE</b>	
	None
1	Cast aluminum NEMA 4/7/9 (only with 1" NPT)

MLS - 1 - 05 - 47 - L1(36)L2(22) - Example: MLS-1-05-47-L1(36)L2(22) Two float level switch with brass stem/Buna-N float, 1/2" NPT mounting, 47" total length.

For liquids other than water, consult Kele Technical Support.