



# KARI Float Switch Operation

## *Manual*

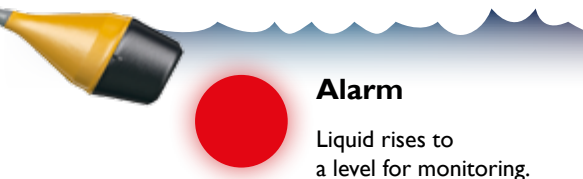


Image M1H shows the operation  
of the KARI Float Switch

# KARI Float Switch

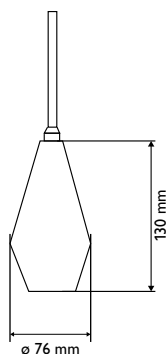
## – compact and reliable

The KARI Float Switch is a control device for charging and discharging pumps and motor and magnetic valves. It is also an alarm device that alerts the user at specified surface levels. SGS FIMKO Oy (the Finnish Electrical Inspectorate) has performed testing in accordance with the Low Voltage Directive (LVD) and approved the KARI Float Switch for use in non-flammable liquids at 250 volts.

### FUNCTIONS

<b>M1C</b>	Change over switch.
<b>M1H</b>	High level alarm.
<b>M1L</b>	Low level alarm.

### DIMENSIONS



### ORDER CODE

<b>M1H</b>	<b>K</b>	<b>N</b>	<b>Au</b>		<b>_K</b>	<b>_20</b>
			<b>Gold-plated contacts (Au)</b> 1 mA ... 100 mA		<b>Deviating surface levels (cm)</b> Vxx	<b>Cable length (m)</b>
			<b>Heat-resistant cable types</b> N = TPU S = silicone T = teflon U = UL/CSA PVC		<b>1st letter</b> Non-standard cable weight B = 250 G G = 400 g K = 700 g L = 1000 g	
			<b>Cable types</b> Empty = PVC A = rubber N = TPU S = silicone T = teflon U = UL/CSA PVC K = heat-resistant			
<b>Circuit diagram</b> M1C, M1H, M1L						

# INSTALLATION AND ADJUSTMENT

The KARI Float Switch is mounted to hang from its cable. The float switch floats on the surface of the liquid and follows the movement of the liquid's surface. Connection occurs when the float tilts. The height of the alarm level is determined by the height at which the float hangs.

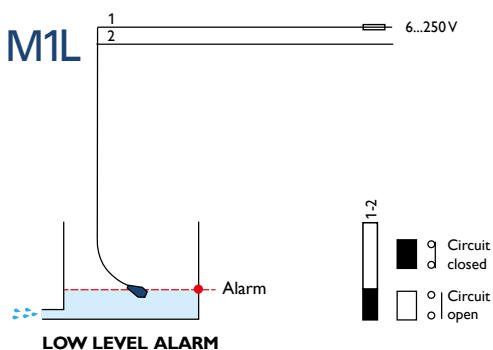
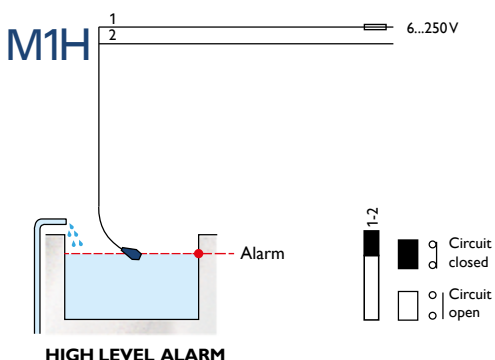
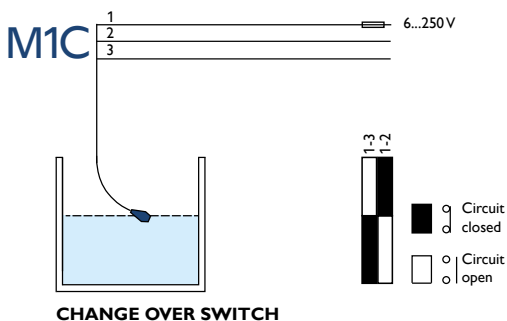
## Installation considerations

- The only adjustable element is the height at which the float hangs. Fine tuning must be carried out on the basis of the applicable object and the conditions.
- If the viscosity of the liquid is particularly high or floating to the sides needs to be restricted, we recommend using a cable weight. Weights delivered as accessories are fixed to the cable with a clamp wedge (see Image 1 on the next page).
- It is important to keep the junction box in a dry environment. If this is not possible, the ends of float switch cables must be covered with, for example, protective grease (see Images 2 and 3 on the next page). An IP68 junction box is also available.
- The installation site must be selected such that the float cannot become caught under or stay on top of any surface or get entangled in other structures (see Image 4 on the next page).
- When the float switch is tested without being floated, its correct orientation must be considered: the 'UP' mark on the side of the bottom portion must face upward. For example, when placed on the floor on its side, the float switch settles into this position because of its internal keel weight (see Image 5 on the next page).
- Tying the float switch from its cable near the float to, for example, the ascension pipe of the pump decreases the useful life of the cable; the float switch should hang freely from its cable (as shown in Image 6 on the next page).

## TECHNICAL INFORMATION

Switching element	Microswitch
Voltage	6 ... 250V AC
Max. rated current	6A res., 3A ind.
Rated current with gold-plated contacts	1 mA ... 100 mA
Maximum DC power	75 VA (=0,3A, 250V)
Pressure rating	200 kPa
Max. operating temperature	+55 °C (+75 °C supplied to order)
Cable length	5 m (other lengths supplied to order)
Weight of 5 m cable	0,6 kg... 0,7 kg
Largest diameter	76 mm
Length of float casing	130 mm
Buoyancy in water	2 N
Float material	Polypropylene (PP)
Cable insulation (standard)	PVC
Other cable options	Rubber, TPU, teflon, silicone
Water-tightness	IP 67

# CIRCUIT DIAGRAM



## A QUALITY FINNISH PRODUCT

Our quality control is based on the ISO 9001 quality management system. Each product is subject to a full operation test. The KARI Float Switch is also available in versions which fulfills the U.S. and Canadian national safety standards.



ROHS

