Note that, for some of the types shown here, order might be unable to be received by the MISUMI Indonesia offices.

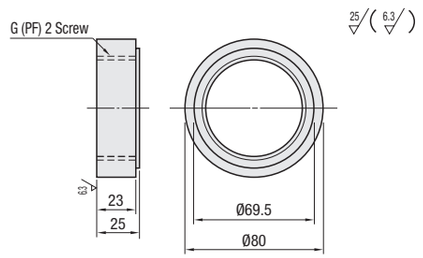
Weld-On Sockets for Heater, Float Switches

Horizontal, Vertical

■Weld-On Sockets for Heater

RoHS10

MSHTS (PF Thread)



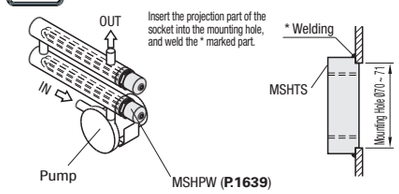
Ⓜ Material: SUS304

■Weld-On Sockets

Part Number / Type	Unit Price
MSHTS	

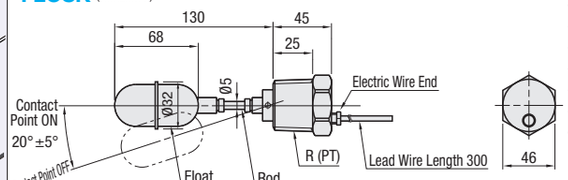
Ordering Example — Part Number: MSHTS

Example

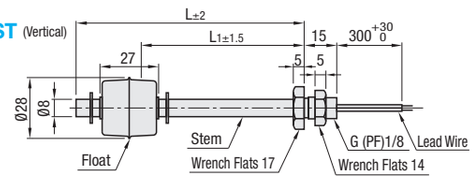


■Float Switches

FLOSK (Horizontal)



FLOST (Vertical)



Ⓜ Material: Rod - Stem - Float Portion: SUS304

■Specifications FLOSK

Usage	Water, Oil, General Liquid
Operating Range (Specific Gravity)	0.8 or More
Pressure Resistance	0.49MPa
Heat Resistance Temperature	-20°C~80°C
Contact Capacity	10W DC/AC
Contact Type	Contact Point

■Specifications FLOST

Usage	liquid such as water, oil and other
Operating Range (Specific Gravity)	0.8 or More
Pressure Resistance	1MPa
Heat Resistance Temperature	0°C~120°C
Contact Capacity	50W DC/AC
Contact Type	Contact Point

Part Number Type	No.	R (PT) /G (PF)	Lead Wire Length	L	L1	Mass (g)	Unit Price 1 ~ 3 pc (s).
FLOSK	80	R1 1/4	300	-	-	500	
FLOST	2	G1/8	300	200	170	65	
	3			300	270	85	
	4			400	370	105	

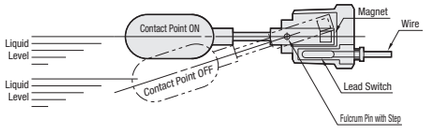
Ordering Example — Part Number: FLOSK80, FLOST2

Ⓟ For orders larger than indicated quantity, please request a quotation.

■Principle of Operation

●FLOSK (Horizontal)

The float moves according to changes in the liquid level. When the magnet comes close to the reed switch (high liquid level), the reed switch will be activated. When the liquid level falls, the contact point will be off again.



●FLOST (Vertical)

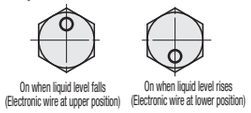
As the liquid level falls and the upper part of the float reaches L1, the contact point turns off.
Ⓟ The contact point is where the upper part of the float overlaps with the L1 dimension.

■Features

· These switches are designed as alarm or signal of water-level for liquids such as water and oil.
· By combining with a power supply interrupt circuit, it can be used as safety circuit to prevent liquid heaters from dry-running.

■Cautions on Installation (FLOSK)

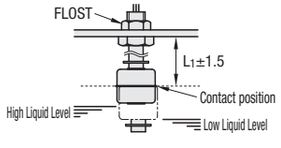
Install horizontally. The electrical wire should exit vertically.



· Confirm that there is no liquid leakage before use.
· Avoid installing in places where the float cannot move smoothly.
· When pouring liquid, do not splash it on the body of this product.
· After the wires are connected, observe the liquid level with eyes and confirm the output before actual use.

■Cautions on Installation (FLOST)

Float may not move properly when mounted diagonally.

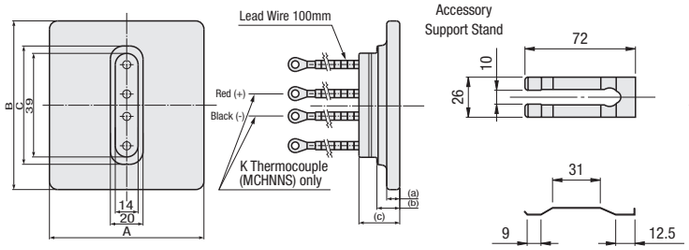


■Far Infrared Ceramic Plate Heaters

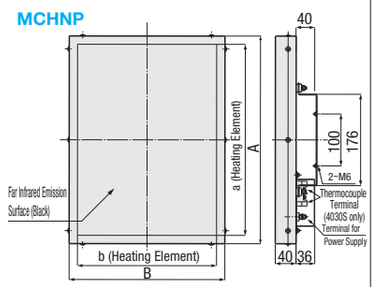
■Far Infrared Plate Heaters

RoHS10

Type	Material: Heater	Material: Element	Material: Lead Wire	Accessory
MCHN (Standard)	Ceramics	NCHW2	Glass Wool Coating	Bracket (SUS304)
MCHNN (Heat Insulating Highly-efficient Type)	Ceramic Heat Insulation Material			
MCHNNS (Heat Insulating Highly-efficient Type with Built-in Temperature Sensor)				



MCHNP



MCHNP
Ⓜ Material: Plate Frame : SUS304
Plate Surface : Aluminum + Far Infrared Coating
Thermocouple: K Thermocouple (4030S only)
Ⓟ Sensor is attached to the center of the heater.

■Far Infrared Ceramic Plate Heaters

Part Number Type	No.	A	B	C	(a)	(b)	(c)	W (Electric Power)	V (Voltage)	Max. Surface Temperature (°C)	Emission Wavelength (μm)	Unit Price MCHN	Unit Price MCHNN	Unit Price MCHNNS
MCHN MCHNN MCHNNS	1	60	245	45 (48)	20 (18)	25 (21)	35 (32)	400	200 Single-phase	600	2~20			
	2							600		680				
	3	122 (125)	122 (125)		23 (8)	25 (14)	38 (25)	400		600				
	4							600		680				

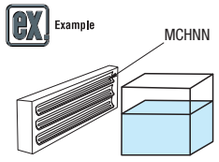
Ⓟ Values in ( ) are for MCHN.

■Far Infrared Plate Heaters

Part Number Type	No.	A	B	a	b	W (Electric Power)	V (Voltage)	Max. Surface Temperature (°C)	Thermocouple Used	Weight (kg)	Unit Price
MCHNP	4030	400	300	368	268	1000	200 Single-phase	250	-	6.0	
	4030S								K Thermocouple		

Ordering Example — Part Number: MCHN4

Example



■Features

· MISUMI's ceramic plate heaters are highly-efficient far infrared heaters.
· The far infrared ray uniformly heats the surface and interior of the object.
· This is little affected by aging, and retains high efficiency for a long time.
· Lightweight, clean with no particle generation, and excels in thermal response.

●Heat Insulating Highly-efficient Type

Heat insulating material is embedded in conventional ceramic plate heaters. Heat insulation effect by air and heat insulating material enables less heat transfer and conduction to the backside of the heater, which enhances heat emission from heater surface.
(Refer to Increased Temperature Properties Graph)

●Heat Insulating Highly-efficient Type with Built-in Temperature Sensor

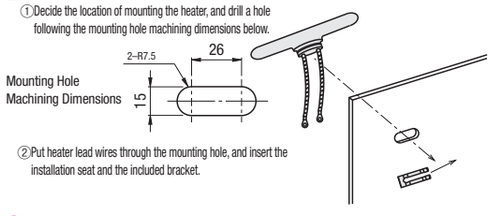
K Thermocouple is attached to measure the heater surface temperature. Suitable when the heater temperature control is required.

●Far Infrared Plate Heaters

Large plate heater of 400x300 enables uniform heating of large area surfaces.
Temperature unevenness will be smaller compared to combining conventional ceramic plate heaters.

■How to Mount (Far Infrared Ceramic Plate Heaters)

①Decide the location of mounting the heater, and drill a hole following the mounting hole machining dimensions below.



②Put heater lead wires through the mounting hole, and insert the installation seat and the included bracket.

Ⓟ Mounting plate thickness should be within 1 ~ 2mm.

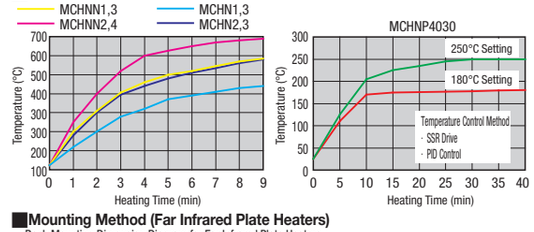
■Precautions for Use

Do not use in places with high humidity. Short may result from such high humidity.

■Usage

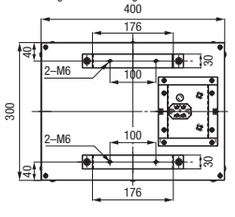
Suitable for clean heating as follows: LED industry, semiconductor industry, food industry, biotechnology industry and heating, burning, drying, softening, preheating, hardening, aging, heat retention of the plastic molding process.

■Temperature Rise Characteristics of Far Infrared Ceramic Plate Heaters and Plate Heaters * For use in an insulated and windless environment



■Mounting Method (Far Infrared Plate Heaters)

Back Mounting Dimension Diagram for Far Infrared Plate Heaters



Ⓟ Decide the heater mounting location, and drill a hole for M6. (Decide the exit for the heater power supply wires and drill a hole if necessary.)