
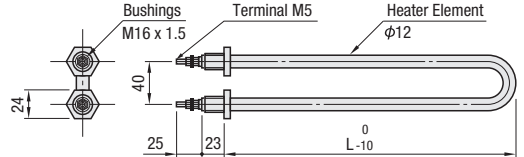


Sheathed Heaters for Liquid Heating / Straight One Terminal

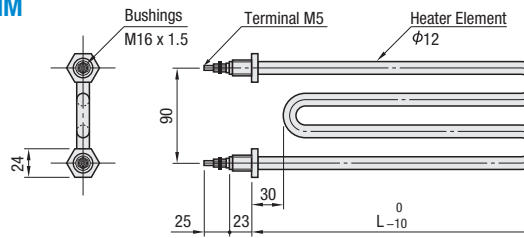
Sheathed Heaters



MSHU 100V, 200V / Single-Phase / For water heating



MSHM



Material:
Heater Element: 316L Stainless Steel
Bushing: 304 Stainless Steel


Accessory: Gasket: Non Asbestos
Flat Washers: 304 Stainless Steel
Nut: 304 Stainless Steel

ⓘ Maximum Operating Temperature: 160°

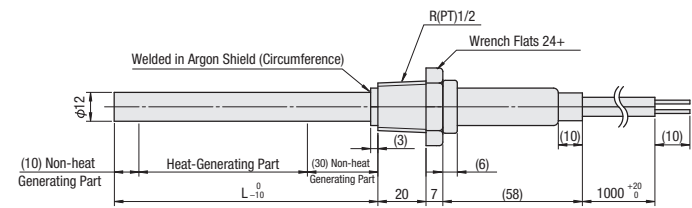
Part Number Type	No.	V (Voltage)	L	W (Electrical Power)	Electrical Power Density (W/cm ²)
	0.5	100	150	500	5.5
	1	200	200	1000	8.0
	1.5	200	300	1500	7.5
	2	200	400	2000	7.0
MSHM					
	0.5	100	100	500	5.0
	1	200	150	1000	5.5
	1.5	200	200	1500	6.0
	2	200	250	2000	6.0

Part Number Example Part Number - V
MSHU1.5 - V200

Straight Heater with Single Terminal



MSSHWS Water Heating / 100V, 200V / Single-Phase



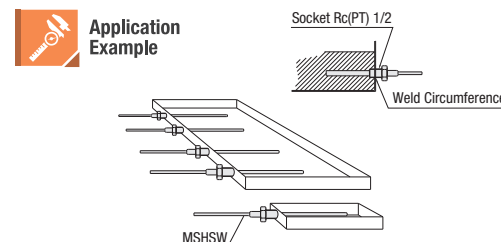
Material: Heater Element: 316 Stainless Steel (For Water)
Bushing: 304 Stainless Steel

Lead Wire Protection Cap: Silicon Rubber (Heat Resistant Temperature: 180°C)
Lead Wire: Glass Braid Silicon Coated Wire (Heat Resistance Temperature: 180°C)

ⓘ RoHS10


Part Number Type	No.	V (Voltage)	L	W (Electric Power)	Electrical Power Density (W/cm ²)
	0.5	100	230	500	7.0
		200			
	0.75	100	325	750	
		200			
	1	200	420	1000	
	1.5	200	610	1500	

Part Number Example Part Number - V
MSSHWS1.5 - V200

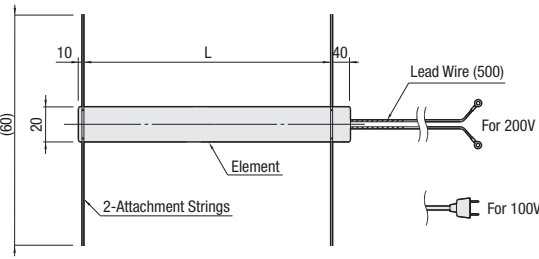


Ribbon Heater

Ribbon Heater



MRBH Standard Type
MRBHF Fluorine Coating Type
100V, 200V / Single-Phase



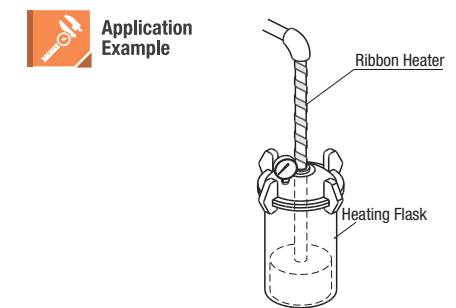
Type	Material		
	Elements	Lead Wire	Lead Wire Film
MRBH	Glass Cloth	Nickel (Ni)	Glass Lead
MRBHF	Glass Cloth (Fluorine Coating)	Copper (Cu)	Fluorine Lead

ⓘ Maximum Operating Temperature Standard Type: 350°
Fluorine Coating Type: 200°C
ⓘ Plug is included with MRBH, MRBHF1 - 2 (for 100V).

ⓘ RoHS10

Part Number Type	No.	L	W (Electrical Power)	V (Voltage)	Electrical Power Density (W/cm ²)
	1	1000	100	100	0.5
	2	2000	200		
	3	1000	100		
	4	2000	200	200	
	5	3000	300		

Part Number Example Part Number
MRBH5



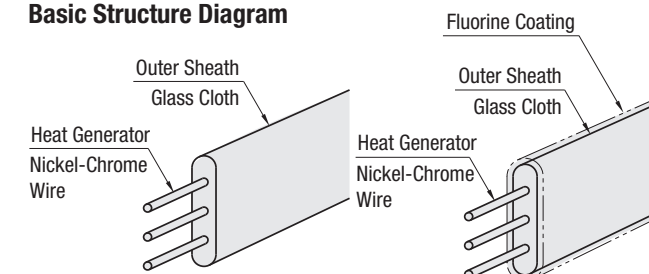
Features

Belt-shaped heaters easily attachable to piping and tanks.
Standard Type:
- Excels in heat resistance as the sheathing of the heater is glass cloth.

Basic Structure

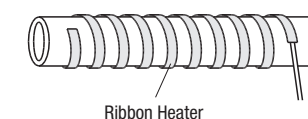
This is a heater that has glass cloth covering the heat generating body. As for the fluorine coating type, the heat generating body is covered with glass cloth by fluorine coating.

Basic Structure Diagram



Mounting Method

After winding over a pipe, fasten the heater with the mounting strap.



Fluorine Coating Type

As the fluorine coating has been applied on the glass cloth sheathing, dust raise is controlled.

Precautions for Use

- ⓘ Do not let the heaters run in open air. This may cause fires and heater element damages. Ensure the heater is closely contacted with a heated object when using.
- ⓘ Prevent the use of heaters from getting wet by water, oil or humidity, as the surface is glass cloth sheathing.
- ⓘ Do not install by overlapping the heater.
- ⓘ Monitor contact condition when connecting wire terminals.
- ⓘ Do not exceed the rated voltage (V).
- ⓘ Disconnect the power source before removing the heater unit from the heated object. Do not touch the heater immediately after the removal.
- ⓘ Use the temperature controller for safety.

Method to Determine the Number of Winding

