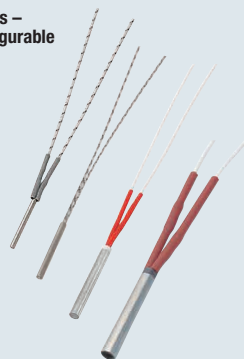


Cartridge Heaters

Standard / Configurable L & W

Cartridge Heaters - Standard / Configurable L & W

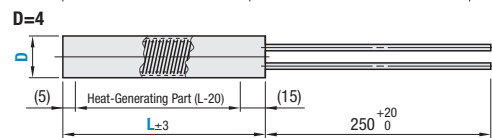
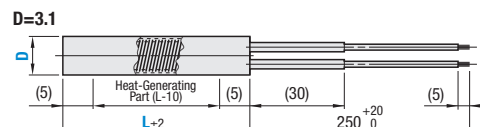


RoHS10

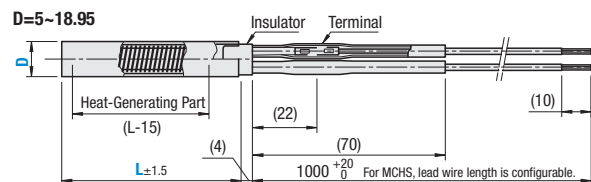
D Tolerance
* The tolerance is the value of heat generator part.

D	Tolerance
3.1	+0.05 -0.1
4	0 -0.08
5 6 8 10 12 14 16 18	-0.02 -0.08
6.25 9.42 12.6 15.77 18.95	+0.05 0

MCHK Standard L & M MCHS Configurable L & W



⓪ Ø4 lead wire has nickel lead wire wrapped with "heat-resistant insulation tape" of polyimide film. That is wrapped with glass fiber taper which is braided with glass. Please peel off the light yellow "heat-resistance insulation tape" before actual use.



- ⓪ The color of insulation at the root of the wire is white or purple.
- ⓪ Maximum Operating Temperature: 600°C
- ⓪ For D5, 6, 6.25, 8, 9.42, the position of the terminal (22) is 17 and 37 with shifting two terminals.
- ⓪ Maximum Operating Temperature means value at the sheath part. Please pay attention to Lead Wire Heat Resistance Temperature and be sure to put the lead wire out of the mounting hole.

D=3.1
Material:
Heater : 304 Stainless Steel Equivalent
Lead Wire : Glass Braid + Copper Wire
Lead Wire Heat Resistance Temperature : 180°C

D=4
Material:
Heater : 304 Stainless Steel Equivalent
Lead Wire : Nickel (Ni)
Lead Wire Film : Glass Braid + Polyimide Film
Lead Wire Heat Resistance Temperature : 250°C

D=5~18.95
Material:
Heater : 304 Stainless Steel Equivalent
Terminal : Copper
Lead Wire : Nickel (Ni)
Lead Wire Film : Glass Braid
Lead Wire Heat Resistance Temperature : 180°C

Fixed L & W

Part Number	L	V Voltage	W Electrical Power	Electrical Power Density W/cm ²
MCHK	3.1 1/8 Inch	120	25	11.8
			50	23.6
		120	30	11.0
			60	21.9
		240	50	12.6
			50	12.6
	4	120	30	11.9
			45	11.9
		120	90	11.9
			120	11.9
		200	40	17.0
			40	17.0
MCHK	5	100	40	10.2
			60	15.3
		200	60	15.3
			50	9.1
		100	80	14.6
			80	14.6
	6	100	100	14.2
			100	14.2
		200	100	14.2
			150	14.7
		200	150	14.7
			200	15.0
MCHK	6	100	50	17.7
			50	17.7
		200	80	17.0
			80	17.0
		200	100	15.2
			100	15.2
	8	100	50	5.9
			130	15.3
		200	80	9.4
			130	15.3
		100	100	8.2
			200	16.3
MCHK	6.25 1/4 Inch	100	120	7.2
			200	12.0
		200	120	7.2
			200	12.0
		100	50	5.7
			80	9.1
	8	100	100	7.8
			120	9.4
		200	120	7.2
			200	12.0
		100	100	7.2
			200	12.0

Part Number	L	V Voltage	W Electrical Power	Electrical Power Density W/cm ²
MCHK	8	100	60	15.9
			60	15.9
		200	100	15.9
			100	15.9
		100	100	11.4
			150	17.1
	10	100	100	11.4
			150	17.1
		200	100	8.8
			120	17.7
		100	200	10.6
			200	17.7
MCHK	9.42 3/8 Inch	100	150	9.2
			250	15.3
		200	150	9.2
			250	15.3
		100	200	9.4
			350	16.4
	12	100	200	9.4
			350	16.4
		200	300	8.8
			500	14.7
		100	350	10.3
			500	14.7
MCHK	12.6 1/2 Inch	100	100	7.5
			120	9.0
		200	150	7.8
			150	7.8
		100	200	8.0
			200	8.0
	14	100	300	7.5
			350	8.8
		200	350	8.8
			500	14.7
		100	80	17.0
			80	17.0
MCHK	14	100	120	15.3
			120	15.3
		200	120	10.9
			180	16.4
		100	120	10.9
			180	16.4
	16	100	120	8.5
			120	8.5
		200	150	10.6
			250	17.7
		100	150	7.3
			300	14.7

Part Number	L	V Voltage	W Electrical Power	Electrical Power Density W/cm ²
MCHK	10	100	200	7.5
			400	15.0
		200	250	9.4
			400	15.0
		100	300	7.1
			500	11.8
	12	60	100	17.7
			150	8.8
		200	150	17.7
			300	17.7
		80	100	6.1
			300	12.2
MCHK	12.6 1/2 Inch	100	180	7.3
			200	12.2
		200	200	6.2
			400	12.5
		100	250	7.8
			500	15.6
	14	60	100	11.8
			600	11.8
		80	100	6.7
			150	8.4
		100	200	7.0
			200	5.9
MCHK	14	100	250	7.4
			300	5.6
		200	300	5.6
			300	5.6
		60	200	10.1
			200	8.7
	16	100	250	6.7
			—	—
		200	400	4.9
			100	4.7
		150	200	3.7
			250	4.2
200	500	4.2		
	700	4.9		

⓪ Please refer to "Precautions for Use" in the Cartridge Heaters Overview on P.3706.

Cartridge Heaters / Anti-Seize Agents / Thermally Conductive Grease

Standard / Configurable L & W continued

Configurable L & W

Part Number	L	V Voltage Selection	W Electrical Power 10 W Increment	F Lead Wire Length 10 mm Increment	Electrical Power Density W/cm ²
MCHK	6	100	50-500	100-1000	2 ≤ W/cm ² ≤ 15 ⓪ W/cm ² = W/(D × (L-15/100)) Calculate with the electrical power density of heat-generating part, not with the overall length.
		110	50-500		
		200	60-600		
		220	80-600		
		100	50-500		
		110	50-500		
	6.25 1/4 Inch	200	60-600		
		220	80-600		
		100	50-600		
		110	50-600		
		200	50-600		
		220	70-1200		
MCHS	8	100	50-600		
		110	50-600		
		200	50-1200		
		220	70-1200		
		100	50-600		
		110	50-600		
	9.42 3/8 Inch	200	50-1200		
		220	70-1200		
		100	50-600		
		110	50-600		
		200	50-1200		
		220	70-1200		
MCHS	10	100	50-800		
		110	50-800		
		200	50-800		
		220	70-1600		
		100	50-800		
		110	50-800		
	12	200	50-1600		
		220	70-1600		
		100	50-800		
		110	50-800		
		200	50-800		
		220	70-1600		
MCHS	12.6 1/2 Inch	100	50-800		
		110	50-800		
		200	50-800		
		220	70-1600		
		100	50-800		
		110	50-800		
	14	200	50-800		
		220	70-1600		
		100	50-800		
		110	50-800		
		200	50-800		
		220	70-1600		
MCHS	15.77 5/8 Inch	100	50-800		
		110	50-800		
		200	50-800		
		220	90-1600		
		100	50-800		
		110	50-800		
	16	200	50-800		
		220	90-1600		
		100	50-800		
		110	50-800		
		200	50-800		
		220	90-1600		
MCHS	18	100	50-800		
		110	50-800		
		200	50-800		
		220	90-1600		
		100	50-800		
		110	50-800		
	18.95 3/4 Inch	200	50-800		
		220	90-1600		
		100	50-800		
		110	50-800		
		200	50-800		
		220	90-1600		

⓪ The specified increment for the L dimension has been changed to a 5 mm increment.

Part Number Example
Part Number - L - V - W - F (FC)
MCHK6 - 60 - V200 - W80
MCHS12.6 - 120 - V200 - W600 - FC3

Part Number Alterations
Part Number - L - V - W - F (FC)
MCHS14 - 220 - V100 - W450 - FC2

Alteration Code	Lead Wire Length
FC	FC
Changes lead wire length.	
Ordering Code: FC2	
Spec.	FC Lead Wire Length (mm)
2	2000
3	3000

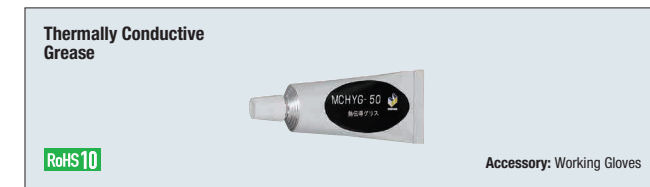
⓪ Not applicable to MCHK.



Part Number	Volume	Heat Resistance Temperature	Specific Gravity	Color	Main Component
MCHYB	30	30 g	600°C	1.4	Black Molybdenum

- By applying to cartridge heaters, gaps will be filled and prevent seizing.
- Please remove leaks in installation before actual use.
- It also works as anti-baking agent for parts surrounding of heat source such as set screws and flanges.
- Wear a pair of working gloves when applying the grease.

Part Number Example
Part Number
MCHYB30
MCHYG50



Part Number	Volume	Heat Resistance Temperature	Conditions of Thermal Conduction	Color	Main Component
MCHYG	50	50 g	200°C	0.96W/m-K	White Silicon

- By applying to a cartridge heater, heat can be effectively transferred to metal plates.
- Grease may outflow when heat reaches around 200°C. Wipe off the out-flowed grease and then use the heater.
- Wear a pair of working gloves when applying the grease.