

Cartridge Heaters

Flanged

Cartridge Heaters – Flanged

MCFH

D	a	b	e	f
6	22	12	10	6
8-12.6	28	18	13	9
14	30	20	14	10

Material: Heater : 321 Stainless Steel
Terminal : Copper
Lead Wire : Nickel (Ni)
Lead Wire Film : Glass Braid
Lead Wire Heat Resistance Temperature: 180°C

- When D=9.42 and 12.6, the O.D. tolerance will be +0.05-0.
- For D6 and D8, the position of the terminal (22) is 17 and 37 with shifting two terminals.
- D=Insulator is not attached for D6.
- Maximum Operating Temperature: 600°C
- 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.

Flanged

Part Number	D	L 1 mm Increment	V (Voltage)	W (Electrical Power) 10 W Increment	F (Lead Wire Length)	Electrical Power Density (W/cm ²)
MCFH	6	50-250	100	50-500	1000	$2 \leq W/cm^2 \leq 15$ $W/cm^2 = W / (D \times (L-15) / 100)$ 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	50-600		
			110	50-600		
	8	50-400	200	50-1200		
			220	70-1200		
			100	50-600		
			110	50-600		
			200	50-1200		
			220	70-1200		
	9.42 3/8 Inch	50-400	100	50-600		
			110	50-600		
			200	50-1200		
			220	70-1200		
			100	50-600		
			110	50-600		
	10	50-600	200	50-1200		
			220	70-1200		
			100	50-800		
			110	50-800		
			200	50-1600		
			220	70-1600		
12	50-600	100	50-800			
		110	50-800			
		200	50-1600			
		220	70-1600			
		100	50-800			
		110	50-800			
12.6 1/2 Inch	50-600	200	50-1600			
		220	70-1600			
		100	50-800			
		110	50-800			
		200	60-1600			
		220	80-1600			

MCFH is not available between L301-L600 for D6, and between L401-600 for D8 and D9.42.
Please refer to "Precautions for Use" in the Cartridge Heaters Overview on P.3704.

Part Number Example

Part Number - L - V - W

MCFH12.6 - 300 - V100 - W350

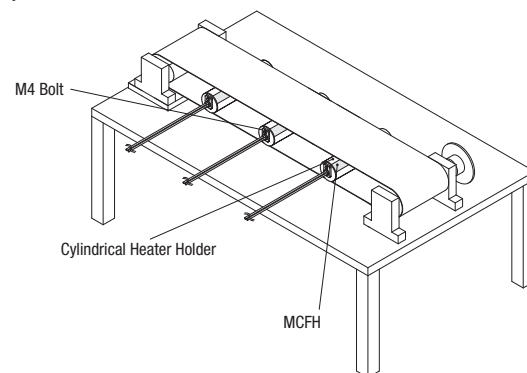
Application Example

Features

- Cartridge heater with flange mounted on the end part. The heater can be easily secured with M4 bolts.
- Prevent the Cartridge Heater from falling off from the device.

Precautions for Use

- Do not let heater run exposed in the atmosphere. Operating the heater when heat-generating part is out of heated products, the wire may break or ignite due to abnormal heating.



Cartridge Heaters

Flexible Hose

Cartridge Heaters – Flexible Hose

MCHH No Flange

MCHH
Material: Heater : 321 Stainless Steel
Lead Wire : Nickel (Ni)
Lead Wire Film : Silicon + Glass Braid
Lead Wire Heat Resistance Temp. : 180°C

When D=9.42, 12.6, the tolerance will be +0.05-0.

MCHHA Flange Shape A
MCHHC Flange Shape C: Only D=16 is available

Terminal Selection

- N No Crimp Terminal
- M With Round Crimp Terminal
- Y With Y-Shaped Crimp Terminal

MCHHA / MCHHC
Material: Heater : 304 Stainless Steel
Flange : 304 Stainless Steel
Lead Wire : Nickel (Ni)
Lead Wire Film : Glass Fiber Coating
Lead Wire Heat Resistance Temperature: 180°C

Shape A and **Shape C** diagrams show flange details with dimensions: 4.5, 13, 23, 18, 0.5, 0.5, 13, 30, 24.

RoHS 10

- Applicable only when D=16 is selected.
- Maximum Operating Temperature: 600°C
- 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.

Flexible Hose

Part Number	D	L 1 mm Increment	V (Voltage)	W (Electrical Power) 10 W Increment	F (Lead Wire Length) 10 W Increment	Electrical Power Density (W/cm ²)
MCHH	8	50-400	100	50-600	1000	$2 \leq W/cm^2 \leq 15$ $W/cm^2 = W / (D \times (L-15) / 100)$ Calculate with the electrical power density of heat-generating part, not with the overall length.
			110	50-600		
			200	50-1200		
			220	70-1200		
			100	50-600		
			110	50-600		
	9.42 3/8 Inch	50-400	200	50-1200		
			220	70-1200		
			100	50-600		
			110	50-600		
			200	50-1200		
			220	70-1200		
	10	50-600	100	50-600		
			110	50-600		
			200	50-1200		
			220	70-1200		
			100	50-800		
			110	50-800		
	12	50-600	200	50-1600		
			220	70-1600		
			100	50-800		
			110	50-800		
			200	50-1600		
			220	70-1600		
12.6 1/2 Inch	50-600	100	50-800			
		110	50-800			
		200	50-1600			
		220	70-1600			
		100	50-800			
		110	50-800			

MCHH is not available between L401-600 for D8 and D9.42.

Flanged Flexible Hoses

Part Number	D	L 1mm Inc.	V (Voltage)	W (Electrical Power) 10W Increment	F (Lead Wire Length) 10mmv Increment	Terminal	Electrical Power Density (W/cm ²)
MCHHA	8	50-400	100	50-500	300-1000	N M Y	$2 \leq W/cm^2 \leq 15$ $W/cm^2 = W / (D \times (L-12) / 100)$ Calculate with the electrical power density of heat-generating part, not with the overall length.
			110	50-1100			
			200	50-1600			
	10		100	50-600			
			110	50-900			
			200	50-1800			
12	100	50-1000					
	110	50-1000					
	200	50-2000					

Please refer to "Precautions for Use" in the Cartridge Heaters Overview on P.3704.

Part Number Example

Part Number - L - V - W - F - Terminal

MCHH12 - 250 - V200 - W1200
MCHHA10 - 200 - V100 - W500 - F500 - N

Type of Terminal

Symbols	Type of Terminal	Nominal Size of Screw
N	No Crimp Terminal	—
M	Crimp Terminal – Round Type	M4
Y	Crimp Terminal – Y-Shaped	M4

Minimum Bending Radius R MCHH

D	R
8	27.5
9.42	37.5
10	37.5
12	37.5
12.6	37.5

Minimum Bending Radius R MCHHA / MCHHC

D	R
8	25
10	25
12	27
16	27

Features

- The lead wire is covered with flexible hose made of stainless steel for external impacts.
- As the product has a protection cover at the base, the lead wire is not pulled directly when the heater is being pulled out.
- The flexible hose prevents the lead wire from damages due to metal fatigue.

Precautions for Use

- Do not let heater run exposed in the atmosphere. Operating the heater when heat-generating part is out of heated products, the wire may break or ignite due to abnormal heating. Operating the heater with the heat-generating part out of heated products may cause the wire to break or ignite due to abnormal heating.
- The flexible hose is not water resistant. Use it away from water.
- Cartridge Heaters cannot be used in water.