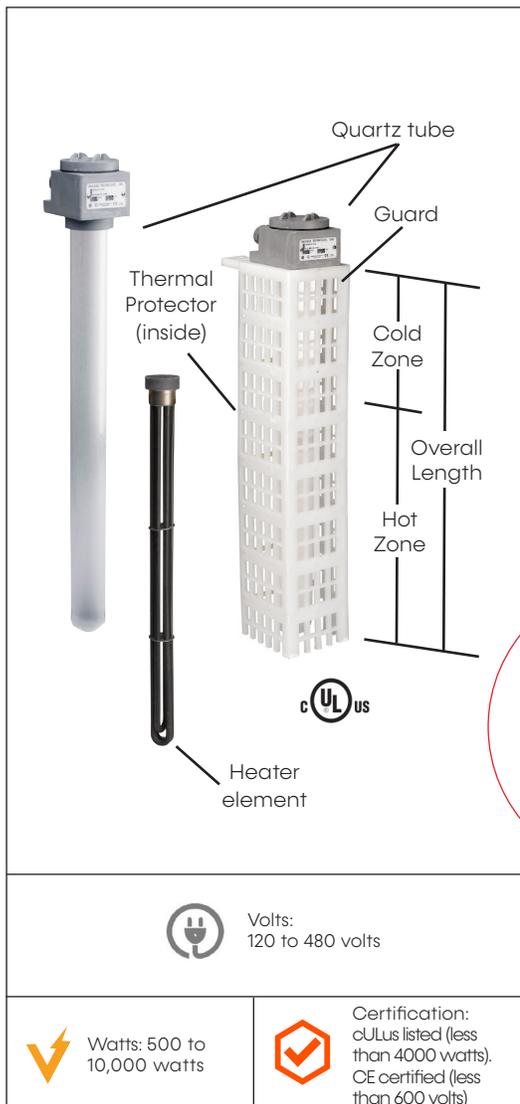


QM Series | Quartz Sheath Heater and Guard



ACIDIC SOLUTIONS QUARTZ HEATER

Compatible with many aggressive chemistries. Heavy wall metal element, quartz sheath and polypropylene guards (sold independently for assembly). For use in most aqueous acidic plating solutions and pickling tanks. Check solution recommendation chart with your chemical supplier for proper sheath material selection. Single phase. 500-10000 watts, 120-600 volts.



FEATURES

Aqueous Plating Performance

Heavy wall quartz sheath with replaceable metal element and polypropylene guards (complete assembly).

Watt densities up to 25 watts per square inch (4 w/cm²) ensure long service life.

Vapor-resistant, flame retardant polypropylene terminal enclosure with 3 ft (.9m) flexible PVC liquid tight conduit.

Over temperature protection included to provide safe operation.

GET
THE SAFE
COMBINATION

ONLY USE THE
RECOMMENDED
COMBINATION OF
ELEMENT AND
SHEATH TUBE

QM Quartz Heater

QM SERIES, QUARTZ HEATERS WITH METAL ELEMENTS						QM & 3QM SERIES GUARDS		Ship Weight	
WATTS	VOLTS	HOT ZONE	OVERALL LENGTH	ELEMENT MODEL NUMBER	TUBE MODEL NUMBER	SINGLE GUARD MODEL #	TRIPLE GUARD MODEL #	SINGLE ASSEMBLY SHIP WT.	TRIPLE ASSEMBLY SHIP WT.
		In./(mm)	In./(mm)					Lbs./(kg)	Lbs./(kg)
500	120	7	10	QM.5110E	QM.5110J-**	QM10G	3QM10G	9	21
	240	(178)	(254)	QM.5210E	QM.5210J-**			(4.1)	(9.5)
1000	120	7	11	QM1111E	QM1111J-**	QM11G	3QM11G	10	22
	240	(178)	(279)	QM1211E	QM1211J-**			(4.5)	(10)
1000	120	7	17	QM1117E	QM1117J-**	QM17G	3QM17G	11	26
	240	(178)	(430)	QM1217E	QM1217J-**			(5)	(11.8)
2000	240	12	17	QM2217E	QM2217J-**	QM17G	3QM17G	11	26
	480	(305)	(432)	QM2417E	QM2417J-**			(5)	(11.8)
2000	240	12	23	QM2223E	QM2223J-**	QM23G	3QM23G	14	30
	480	(305)	(584)	QM2423E	QM2423J-**			(6.4)	(13.6)
3000	240	18	23	QM3223E	QM3223J-**	QM23G	3QM23G	14	30
	480	(457)	(584)	QM3423E	QM3423J-**			(6.4)	(13.6)
3000	240	18	29	QM3229E	QM3229J-**	QM29G	3QM29G	17	34
	480	(457)	(737)	QM3429E	QM3429J-**			(7.7)	(15.4)
3500	240	21	29	QM3.5229E	QM3.5229J-**	QM29G	3QM29G	17	34
	480	(533)	(737)	QM3.5429E	QM3.5429J-**			(7.7)	(15.4)
4000	240	28	35	QM4235E	QM4235J-**	QM35G	3QM35G	20	38
	480	(711)	(889)	QM4435E	QM4435J-**			(9.1)	(17.2)
4000	240	28	41	QM4241E	QM4241J-**	QM41G	3QM41G	23	44
	480	(711)	(1041)	QM4441E	QM4441J-**			(10.4)	(20)
5000	240	33	41	QM5241E	QM5241J-**	QM41G	3QM41G	23	44
	480	(838)	(1041)	QM5441E	QM5441J-**			(10.4)	(20)
5000	240	33	47	QM5247E	QM5247J-**	QM47G	3QM47G	26	48
	480	(838)	(1194)	QM5447E	QM5447J-**			(11.8)	(21.8)
6000	240	39	47	QM6247E	QM6247J-**	QM47G	3QM47G	26	48
	480	(991)	(1194)	QM6447E	QM6447J-**			(11.8)	(21.8)
6000	240	39	52	QM6252E	QM6252J-**	QM52G	3QM52G	29	52
	480	(991)	(1321)	QM6452E	QM6452J-**			(13.2)	(23.6)
8000	240	49	59	QM8259E	QM8259J-**	QM59G	3QM59G	31	55
	480	(1245)	(1499)	QM8459E	QM8459J-**			(14.1)	(25)
10000	240	62	71	QM10271E	QM10271J-**	QM71G	3QM71G	34	65
	480	(1575)	(1803)	QM10471E	QM10471J-**			(15.4)	(29.5)

Heating element, quartz tube and single or triple guard all sold separately. Symbols in chart correspond to ordering information on reverse.

SPECIFICATIONS

Wattages

500 Watts to 10,000 Watts

Voltages

120 Volts to 480 Volts

Options

Replaceable thermal protectors:
P4:for solutions.

Resettable thermal protectors:
P2: for solutions.
P6: for solutions.

Special configurations & lengths.

Longer wire and conduit lengths

Three phase elements.

Fluoropolymer (PTFE) guards for chromic acid or solutions over 180°F (82°C).

Lower watt densities for highly viscous solutions

Temperature and level controls sized to match the heater (sold separately).

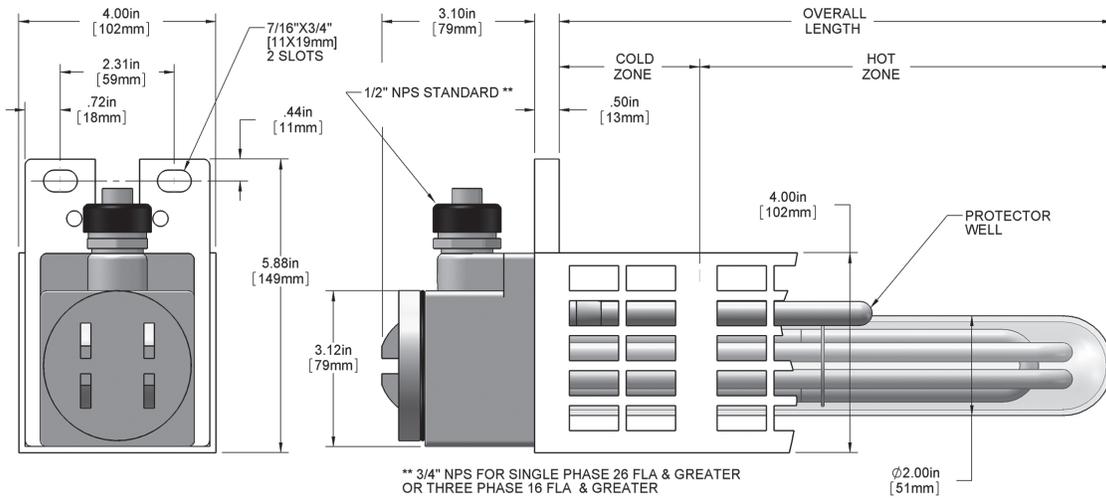
NOTE: Not for use in hydrofluoric acid or alkaline solutions.

Safety Features

Grounded internal metal element

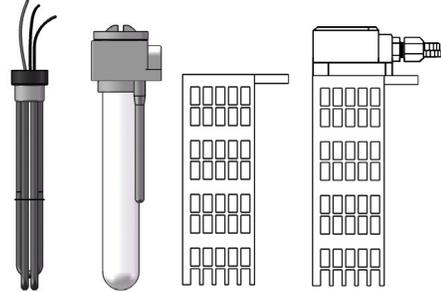
Thermal protector built in.
Replaceable PI protector standard for solutions.

DIMENSIONS



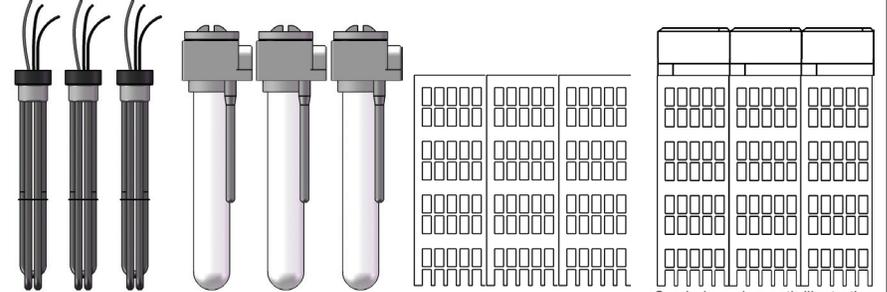
Each single tube quartz heater consists of:

Heating element + Quartz tube + Single guard = Complete QM heater assembly



Each triple tube quartz heater consists of elements, 3 quartz tubes and guard to create a complete triple tube quartz heater:

3 heating elements + 3 quartz tubes + Triple guard = Complete QM heater assembly



Symbols underneath illustrations correspond with chart on reverse

SINGLE QUARTZ ELEMENT ORDERING INFORMATION

Series	Wattage	Voltage	Length	Options	Type of Protector	Wire and Conduit Length
	.5 = 500 1 = 1000 2 = 2000 3 = 3000 3.5 = 3500 4 = 4000 5 = 5000 6 = 6000 8 = 8000 10 = 10000	1 = 120 2 = 240 4 = 480 -208- = 208 -380- = 380 -415- = 415 -600- = 600	10 = .5kW 11 = 1kW 17 = 2kW 23 = 3kW 29 = 3.5kW 35 = 4kW 41 = 5kW 47 = 6kW 59 = 8kW 71 = 10kW specify custom lengths, not to exceed tank depth			36" length standard (no designator) specify variations from standard Ex: -X84 = 84"
	QM = Quartz				Replaceable Protector	
					P1 (std)	for solutions up to 180°F
					P4	for solutions up to 230°F
					Resettable Protector	
					(additional control components required)	
					P2	for solutions up to 180°F
					P6	for solutions up to 180°F
					no designator = single phase power (standard) -3 = three phase power	