

HEATING MANTLES



CG-10000

CG-10000 HEATING MANTLE, HEMISPHERICAL, GLAS-COL®

The Glas-Col® Series O hemispherical heating mantle is designed for use with round bottom flasks and allows for full viewing of contents. The mantle accommodates single and multi-neck flasks and should be used with the Series O mantle supports. All mantles are 115V and CSA certified and supplied with a separable 4ft 2-wire cord and locking connector. For Series O mantle supports, see CG-10010 or CG-10012. For controller, see CG-15005 or CG-15009.

Part Number	Capacity (mL)	Watts
CG-10000-01	50	60
CG-10000-02	100	80
CG-10000-03	125	80
CG-10000-04	200	100
CG-10000-05	250	180
CG-10000-06	300	180
CG-10000-07	500	270
CG-10000-08	1000	380
CG-10000-09	2000	500
CG-10000-10	3000	500
CG-10000-11	5000	600
CG-10000-12	12000	2 @ 650



CG-10004

CG-10004 HEATING MANTLE, HEATING/INSULATING TOP, GLAS-COL®

This Glas-Col® heating/insulating mantle helps prevent vapor condensation in the upper half of a flask during distillation of high-boiling materials. The top is designed for use with CG-11000, CG-12000 or CG-125000 heating mantles. It protects the flask, the solutions, and the laboratory in the following ways: 1) from stray drafts, which would disturb the reflux ratio during fractionation; 2) from flying glass of flask implosions in high-vacuum distillations; 3) from falling objects; and, 4) from thermal strain between top and lower half of flask during high-temperature operations. With a glass-fabric construction and laced-side opening, its elliptical hole accommodates a 1, 2, or 3-neck flask. All mantles, except the 72L which is 230V, are 115V and CSA certified and supplied with a separable 4ft 2-wire cord and locking connector. For controller, see CG-15005 or CG-15009.

Part Number	Capacity (mL)	Watts
CG-10004-01	250	140
CG-10004-02	300	140
CG-10004-03	500	140
CG-10004-04	2000	200
CG-10004-05	3000	200
CG-10004-06	5000	300
CG-10004-07	12000	590
CG-10004-08	22000	650
CG-10004-09	50000	1000
CG-10004-10	72000	1000

NOTE: CG-10004 is also available as insulating tops only. Please contact us for details.

HEATING MANTLES

CG-10007 HEATING MANTLE, UNJACKETED CYLINDRICAL VESSEL, GLAS-COL®

The Glas-Col® Series O heating mantle is used with an unjacketed round bottom cylindrical reaction vessel, CG-1920 or CG-1922, featuring a Duran® flange. The mantle covers the bottom and sides of the vessel leaving enough room under the flange to safely remove the reaction vessel clamp while the mantle is in place. All mantles are 115V and CSA certified and supplied with a separable 4ft 2-wire cord and locking connector. For controller, see CG-15005 or CG-15009.

Part Number	Unjacketed Vessel Capacity (mL)	Mantle ID (in)	Mantle Depth (in)	Watts
CG-10007-10	500	4-3/16	4	250
CG-10007-12	1000	4-3/16	6-7/8	400
CG-10007-14	2000	6-5/16	6-3/4	650
CG-10007-16	3000	6-5/16	9	900
CG-10007-18	4000	6-5/16	11-1/4	1000
CG-10007-20	10000	8-7/16	15-1/8	2 @ 1000

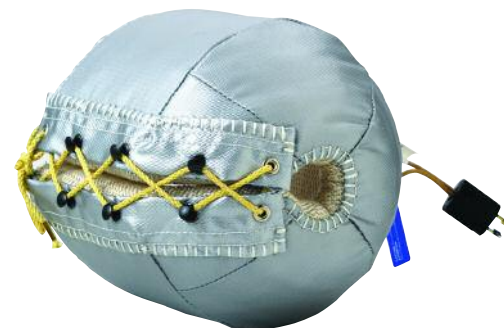


CG-10007

CG-10009 HEATING MANTLE, UNJACKETED CYLINDRICAL VESSEL, BOTTOM DRAIN OPENING

The Glas-Col® Series O heating mantle is similar to CG-10007 except mantle is slit lengthwise to a 1 1/2" hole in the bottom center with lacing closure to accommodate an unjacketed cylindrical reaction vessel, CG-1924 with a bottom drain. All mantles are 115V and CSA certified and supplied with a separable 4ft 2-wire cord and locking connector. For controller, see CG-15005 or CG-15009.

Part Number	Unjacketed Vessel Capacity (mL)	Mantle ID (in)	Mantle Depth (in)	Watts
CG-10009-10	500	4-3/16	4	250
CG-10009-12	1000	4-3/16	6-7/8	400
CG-10009-14	2000	6-5/16	6-3/4	650
CG-10009-16	3000	6-5/16	9	900
CG-10009-18	4000	6-5/16	11-1/4	1000
CG-10009-20	10000	8-7/16	15-1/8	2 @ 1000



CG-10009

HEATING MANTLES

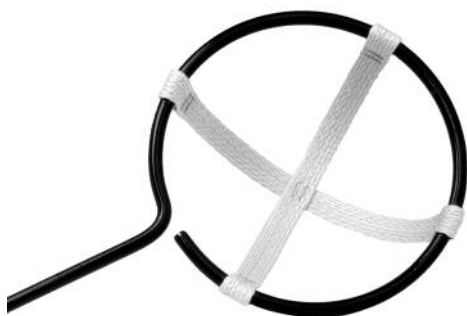


CG-10009-110

**INSULATING
ONLY**



CG-10011



CG-10010



CG-10009 MANTLE, HEATING, JACKETED CYLINDRICAL VESSEL

The Glas-Col® Series O heating mantle is used with a jacketed cylindrical reaction vessel. Mantle is made from a heavy fiberglass fabric on the inside with a silicone-coated fiberglass fabric on the outside. Mantle is slit lengthwise to a hole in the bottom center with lacing closure to accommodate a bottom drain valve. All mantles are 115V and CSA certified and supplied with a separable 4ft 2-wire cord and locking connector. For controller, see CG-15005 or CG-15009.

Part Number	Jacketed Vessel Capacity	Circuits x Watts
CG-10009-110	10L	2 x 925
CG-10009-115	15L	2 x 1300
CG-10009-120	20L (Short)	2 x 1300
CG-10009-130	30L	3 x 1100
CG-10009-150	50L (Short)	3 x 1275
CG-10009-151	50L	4 x 1250

CG-10011 INSULATING MANTLE, JACKETED CYLINDRICAL VESSEL

Similar to CG-10009 but without the heating element. For use as a heat or cold shield on Chemglass jacketed reactors. Insulating jacket is made from a heavy fiberglass fabric on the inside with a silicone-coated fiberglass fabric on the outside. Mantle is slit lengthwise to a hole in the bottom center with lacing closure to accommodate a bottom drain valve.

Part Number	Jacketed Vessel Capacity
CG-10011-110	10L
CG-10011-115	15L
CG-10011-120	20L (Short)
CG-10011-130	30L
CG-10011-150	50L (Short)
CG-10011-151	50L

CG-10010 MANTLE, EXTENSION SUPPORT, GLAS-COL®

This lattice mount support holds spherical and hemispherical Glas-Col® Series O heating mantles up to 5L capacity. The steel support, with its fabric strap basket, is strong, handy and durable. Attaches easily to stable ring stands or distillation racks. Supports are painted gray. The CG-10010-01 through CG-10010-06 are made from 3/8" diameter rod while the CG-10010-07 through CG-10010-08 are made from 1/2" diameter rod.

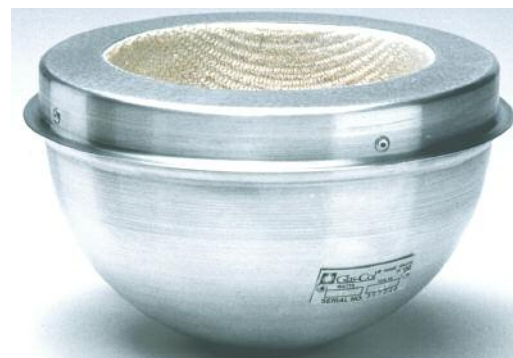
Part Number	Fits Mantle Capacity (mL)	Inside Diameter (in)
CG-10010-01	50	3-3/4
CG-10010-02	100-200	4-7/8
CG-10010-03	250-300	5-1/2
CG-10010-04	500	5-7/8
CG-10010-05	1000	7-1/2
CG-10010-06	2000	9-1/4
CG-10010-07	3000	9-3/8
CG-10010-08	5000	11-1/8

HEATING MANTLES

CG-11000 HEATING MANTLE, SPHERICAL, GLAS-COL®

The Glas-Col® Series M heating mantle is the most compact mantle with an aluminum shell that can heat flasks up to 72L. Like the series TM, this mantle has a durable aluminum housing outside and resilient glass fabric inside to support flasks and protect flask walls from thermal strain. The internal operating temperature is 450° C. Only the bottom of the flask is covered so the contents being heated are fully visible. The mantle is grounded through the aluminum housing and requires a support such as CG-11004 through CG-11006. All mantles, except the 72L which is 230V, are 115V and CSA certified and supplied with a separable 4ft 2-wire cord and locking connector. For controller, see CG-15005 or CG-15009.

Part Number	Capacity (mL)	Watts
CG-11000-07	500	270
CG-11000-08	1000	380
CG-11000-09	2000	500
CG-11000-10	3000	500
CG-11000-11	5000	600
CG-11000-12	12000	2 @ 650
CG-11000-13	22000	2 @ 770
CG-11000-14	50000	3 @ 1000
CG-11000-15	72000	2 @ 2000



CG-11000

CG-11004 MANTLE, EXTENSION SUPPORT, SERIES M, GLAS-COL®

The Glas-Col® extension support for use with smaller Series M heating mantles. Attached to a stable ring stand or distillation rack, the support can be adjusted to any convenient height. Support is painted gray and has a 6" long, 1/2" OD rod.

Part Number	Capacity Size (mL)	Watts
CG-11004-02	250 to 500	162
CG-11004-03	1000	194
CG-11004-04	2000 to 3000	259
CG-11004-05	5000	311



CG-11004

CG-11006 HEATING MANTLE, TRIPOD SUPPORT, GLAS-COL®

The Glas-Col® tripod support sits on the floor or a bench to hold a Series M heating mantle ranging in sizes from 3 to 72L. Mounting holes are in the foot of each leg for securing to floor or bench. Support is painted gray and shipped **unassembled**. Codes -24 through -30 are adjustable in heights from 24" to 36" in 3" increments.

Fixed Height:

Part Number	Capacity (L)	Height (in)	Inside Diameter (mm)
CG-11006-01	3	14	259
CG-11006-02	5	14	311
CG-11006-03	12	14	425
CG-11006-04	22	14	489
CG-11006-05	50	16	616
CG-11006-06	72	18	686

Adjustable Height:

Part Number	Capacity (L)	Inside Diameter (mm)
CG-11006-24	12	425
CG-11006-26	22	489
CG-11006-28	50	616
CG-11006-30	72	686



Fixed

CG-11006



Adjustable

HEATING MANTLES



CG-12000

CG-12000 HEATING MANTLE, SPHERICAL, GLAS-COL®

The Glas-Col® Series TM spherical heating mantle is designed for use with round bottom flasks and allows for full viewing of contents. Larger sizes have multiple circuits for ease of temperature control when a flask is less than half full. The Series TM mantle is available with a bottom hole for flask drain on a special order basis. Terminal box models are available with switches and pilot lights. All mantles, except the 72L which is 230V, are 115V and CSA certified and supplied with a separable 4ft 2-wire cord and locking connector. For controller, see CG-15005 or CG-15009. The 50 and 72L sizes are furnished with a terminal box instead of a cord.

Part Number	Capacity Size (mL)	Watts
CG-12000-02	100	80
CG-12000-05	250	180
CG-12000-07	500	270
CG-12000-08	1000	380
CG-12000-09	2000	500
CG-12000-10	3000	500
CG-12000-11	5000	600
CG-12000-12	12000	2 @ 650
CG-12000-13	22000	2 @ 770
CG-12000-14	50000	3 @ 1000
CG-12000-15	72000	2 @ 2000



CG-12500

CG-12500 HEATING MANTLE, HIGH TEMPERATURE, STM SERIES, GLAS-COL®

The Glas-Col® Series STM heating mantle performs the same function as a Series TM heating mantle, plus operations requiring more heat. This mantle is useful in distillation and fractionation processes, especially when time is important. The higher temperature range enables operations to be performed that require more heat, such as rapid distillation of water and liquid-phase cracking in a flask, where the products are taken out of the flask through a column. Withstanding an upper internal operating temperature of 650° C, the STM mantle is very resistant to burnout. The STM mantle has a durable aluminum exterior and a resilient and pliable interior to cradle glassware. A splash guard and poncho safety shield can be used to prevent damage from accidental spills. **CAUTION: The STM series heating mantle is recommended for use with flammable solvents ONLY when used with a poncho safety shield.**

Part Number	Capacity (mL)	Watts
CG-12500-01	100	230
CG-12500-04	250	470
CG-12500-06	500	470
CG-12500-07	1000	600
CG-12500-08	2000	870
CG-12500-09	3000	970

HEATING MANTLES

CG-14000 HEATING MANTLE, MICRO, SPHERICAL FLASK, GLAS-COL®

The Glas-Col® micro heating mantle provides precise heat control for small spherical flasks. This mantle is used extensively in analytical work and in purification of research products when only small samples are available. Supplied complete with a 3ft 2-wire cord and locking connector.

NOTE: Due to the voltage of the micro mantle, a variable voltage transformer is required. Please see CG-15006-20 and CG-15010-20 on page 257.

Part Number	Capacity (mL)	Watts	Volts
CG-14000-01	5	12	30
CG-14000-02	10	20	30
CG-14000-05	20	27	60
CG-14000-04	25	30	60



CG-14000

CG-14002 HEATING MANTLE, MICRO, PEAR SHAPED FLASK, GLAS-COL®

Similar to CG-14000, but for use with pear shaped flasks. Supplied complete with a 3ft 2-wire cord and locking connector.

NOTE: Due to the voltage of the micro mantle, with the exception of the 100mL and 250ml, a variable voltage transformer is required. Please see CG-15006-20 and CG-15010-20 on page 257.

Part Number	Capacity (mL)	Watts	Volts
CG-14002-01	5	12	30
CG-14002-02	10	15	30
CG-14002-03	25	25	60
CG-14002-04	50	35	60
CG-14002-06	100	70	115
CG-14002-08	250	135	115



CG-14002

MANTLE CONTROLLERS



CG-14050

CG-14050 HEATING TAPE, GLAS-COL®

Tape heats odd lengths of glass or metal pipe. Ribbon-type heating elements running lengthwise in the tape are encased in durable glass braiding and are impregnated and covered with tough silicone rubber. The silicone rubber insulates stranded terminal leads at one end and waterproofs the fittings at both ends. It also permits use in high-moisture areas and helps to make the tapes resistant to most laboratory environment conditions. All tapes are supplied with a 2 blade plug and have a temperature limit of 480° F. NOTE: Power ratings listed are for tapes not covered by insulation when installed. If covered, temperature should be monitored and controlled to avoid exceeding the 480° F limit. Short narrow tapes that are rated at less than 115V must be operated with a variable voltage transformer.

NOTE: Due to the voltage of the heating tape, a variable voltage transformer is required. Please see CG-15005-20 on page 256.

Part Number	Width x Length	Watts	Volts	Ohms/foot
CG-14050-01	1/4" x 4ft	60	45	9.08
CG-14050-02	1/4" x 6ft	90	70	9.08
CG-14050-03	1/4" x 8ft	120	95	9.08
CG-14050-04	1/4" x 10ft	150	120	9.08
CG-14050-05	1/2" x 4ft	140	45	3.77
CG-14050-06	1/2" x 6ft	210	70	3.77
CG-14050-07	1/2" x 8ft	280	95	3.77
CG-14050-08	1/2" x 10ft	340	115	3.77
CG-14050-10	5/8" x 5ft	145	115	18.15
CG-14050-11	5/8" x 6ft	120	115	18.15
CG-14050-12	5/8" x 7ft	105	115	18.15
CG-14050-13	5/8" x 8ft	90	115	18.15
	5/8" x 9ft	80	115	18.15
CG-14050-14				
CG-14050-16	1" x 3ft	150	115	27.25
CG-14050-17	1" x 4ft	120	115	27.25
CG-14050-18	1" x 5ft	100	115	27.25
CG-14050-19	1" x 10ft	700	115	1.88



CG-15005

CG-15005 HEATING MANTLE CONTROLLER, SINGLE CIRCUIT, OPTICHEM®

Our Opti-Chem® line of heating mantle controllers feature solid-state proportional voltage power control in a compact benchtop design. Controllers provide accurate manual control of heating mantles, tapes and all other resistive loads with an adjustable output range from 5 to 100% of the rated voltage. Controller is 4" W x 5" D x 3.7" High. All units are supplied with a 6ft separable power cord, a grounded, 3-wire receptacle and lighted power switch. 3-Year warranty. Manual is available online under Tech Notes.

Part Number	Description
CG-15005-01	Single Circuit Controller, 1200W, 10A, 120VAC

OptiChem® is a Registered Trademark of Chemglass, Inc.

MANTLE CONTROLLERS

CG-15006 HEATING MANTLE CONTROLLER, SINGLE CIRCUIT, VARIABLE VOLTAGE, OPTICHEM®

Similar to CG-15005-01, but the voltage output can be adjusted between 30 and 60V. Controller is 4" W x 5" D x 3.7" High. All units are supplied with a 6ft separable power cord, a grounded, 3-wire receptacle and lighted power switch. 3-Year warranty. Manual is available online under Tech Notes. **Controller for use with CG-14000 and CG-14002 Heating Mantles rated at 30 or 60 Volts.**

115V Output Controllers:

Part Number	Description
CG-15006-20	Single Circuit Controller, 30/60VAC Variable

OptiChem® is a Registered Trademark of Chemglass, Inc.

CG-15009 HEATING MANTLE CONTROLLER, DOUBLE CIRCUIT, OPTICHEM®

Our OptiChem® line of heating mantle controllers feature solid-state proportional voltage power control in a compact benchtop design. Controllers provide accurate manual control of heating mantles, tapes and all other resistive loads with an adjustable output range from 5 to 100% of the rated voltage. Controller is 8" W x 6" D x 3.7" High. All units are supplied with a 6ft separable power cord, a grounded, 3-wire receptacle and lighted power switch. 3-Year warranty. **Manual is available online under Tech Notes.**

Part Number	Description
CG-15009-01	Double Circuit Controller, 115V, 840W, 7A (per circuit)

OptiChem® is a Registered Trademark of Chemglass, Inc.

CG-15010 HEATING MANTLE CONTROLLER, DOUBLE CIRCUIT, VARIABLE VOLTAGE, OPTICHEM®

Similar to CG-15009-01, but the voltage output can be adjusted between 30 and 60V. Controller is 8" W x 6" D x 3.7" High. All units are supplied with a 6ft separable power cord, a grounded, 3-wire receptacle and lighted power switch. 3-Year warranty. Manual is available online under Tech Notes. **Controller for use with CG-14000 and CG-14002 Heating Mantles rated at 30 or 60 Volts.**

Part Number	Description
CG-15010-20	Double Circuit Controller, Variable Voltage, 60W, 1A (per circuit)

OptiChem® is a Registered Trademark of Chemglass, Inc.



CG-15006



CG-15009



CG-15010

HEATING MANTLES



CG-10009-110

CG-10009 MANTLE, HEATING, JACKETED CYLINDRICAL VESSEL

The Glas-Col® Series O heating mantle is used with a jacketed cylindrical reaction vessel. Mantle is made from a heavy fiberglass fabric on the inside with a silicone-coated fiberglass fabric on the outside. Mantle is slit lengthwise to a hole in the bottom center with lacing closure to accommodate a bottom drain valve. All mantles are 115V and CSA certified and supplied with a separable 4ft 2-wire cord and locking connector. For controller, see CG-15005 or CG-15009.

Part Number	Jacketed Vessel Capacity	Circuits x Watts
CG-10009-110	10L	2 x 925
CG-10009-115	15L	2 x 1300
CG-10009-120	20L (Short)	2 x 1300
CG-10009-130	30L	3 x 1100
CG-10009-150	50L (Short)	3 x 1275
CG-10009-151	50L	4 x 1250

INSULATING ONLY



CG-10011

CG-10011 INSULATING MANTLE, JACKETED CYLINDRICAL VESSEL

Similar to CG-10009 but without the heating element. For use as a heat or cold shield on Chemglass jacketed reactors. Insulating jacket is made from a heavy fiberglass fabric on the inside with a silicone-coated fiberglass fabric on the outside. Mantle is slit lengthwise to a hole in the bottom center with lacing closure to accommodate a bottom drain valve.

Part Number	Jacketed Vessel Capacity
CG-10011-110	10L
CG-10011-115	15L
CG-10011-120	20L (Short)
CG-10011-130	30L
CG-10011-150	50L (Short)
CG-10011-151	50L

HEATING MANTLES / HOSE CONNECTIONS

CG-10013 HEATING MANTLE, UPPER PORTION, FABRIC

For use with CG-1924 and CG-1972 unjacketed cylindrical reaction vessels. Glass fabric heating mantle with a lengthwise slit held together with a hook and lace closure. Mantle is 115 volts and is supplied complete with a separable 4 foot, 2 wire extension cord with locking connector.

Part Number	Reactor Capacity	Watts
CG-10013-10	10 Liter	720
CG-10013-15	15 Liter	930
CG-10013-20	20 Liter (Short)	1100
CG-10013-21	20 Liter (Tall)	1250
CG-10013-30	30 Liter	1250
CG-10013-50	50 Liter	2 @ 1250

CG-12012 HEATING MANTLE, LOWER PORTION, ALUMINUM

For use with CG-1924 and CG-1972 unjacketed cylindrical reaction vessels. TM Series aluminum housed glass fabric heating mantle with hole centered in the bottom. Mantle is 115 volts and is supplied complete with a separable 4 foot, 2 wire extension cord with locking connector.

Part Number	Reactor Capacity	Watts
CG-12012-10	10 Liter	450
CG-12012-15	15 / 20 Liter (Tall)	500
CG-12012-20	20 Liter (Short)	450
CG-12012-30	30 / 50 liter	600



**CG-10013
CG-12012**

CG-195-H CAP WITH APERTURE, GL THREAD, HIGH TEMPERATURE

Open top cap for use with GL screw threads. The cap combined with the CG-197 sealing ring will accommodate tubing of the listed diameter. Cap is made from PPS (polyphenylsiloxan) and will withstand temperatures up to 250° C.

Part Number	Thread Size	Aperture Size (mm)
CG-195-H-01	GL-14	9.5
CG-195-H-02	GL-18	11.0



**CG-195-H
CG-198-H**

CG-198-H REMOVABLE HOSE CONNECTION, GL THREAD, HIGH TEMPERATURE

PFA hose connections with a Viton rubber seal for use with GL-14 or GL-18 glass screw threads. Enables the connection of cooling or vacuum hose by simply screwing either style (straight or bent) onto the glass thread instead of forcing tubing over a serrated glass connector. Connection will withstand temperatures up to 250° C.

Part Number	Thread Size	Style	Hose OD (mm)	Hose ID (mm)	Length (mm)
CG-198-H-10	GL-14	Straight	8.7	6	45
CG-198-H-12	GL-18	Straight	10.5	7	51
CG-198-H-14	GL-14	Bent	8.7	6	49
CG-198-H-16	GL-18	Bent	10.5	7	65