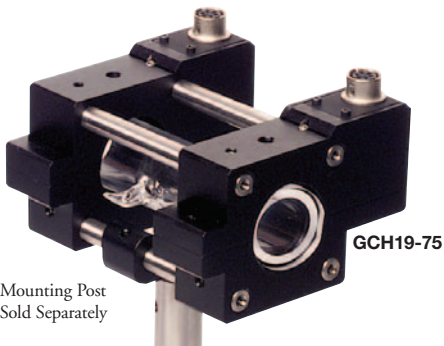


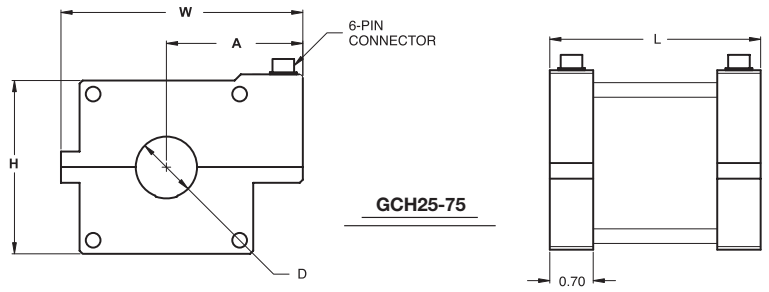
## Optics

- Optical Systems
- Free Space Isolators
- E-O Devices
- Spherical Singlets
- Multi-Element Lenses
- Cylindrical Lenses
- Aspheric Lenses
- Mirrors
- Diffusers & Lens Arrays
- Windows
- Prisms
- Gratings
- Polarization Optics
- Beamsplitters
- Filters & Attenuators
- Gas Cells

## Reference Cell Ovens



Mounting Post  
Sold Separately



### Specifications

- **Input Voltage:** 12VDC
- **Compatible With Controller:** TC200
- **Connectors:**  
6-Pin Mini Round Push/Pull Connector
- **Temperature Range:**  
Room Temp to 80°C

Model	A	W	H	L*	D*
GCH09-50	1.60" 40.6mm	2.70" 68.6mm	1.60" 40.6mm	1.97" 50mm	0.35" 9mm
GCH09-75	1.60" 40.6mm	2.70" 68.6mm	1.60" 40.6mm	2.95" 75mm	0.35" 9mm
GCH09-150	1.60" 40.6mm	2.70" 68.6mm	1.60" 40.6mm	5.90" 150mm	0.35" 9mm
GCH19-75	1.60" 40.6mm	2.70" 68.6mm	1.60" 40.6mm	2.95" 75mm	0.75" 19mm
GCH19-100	1.60" 40.6mm	2.70" 68.6mm	1.60" 40.6mm	3.94" 100mm	0.75" 19mm
GCH25-75	2.20" 55.9mm	3.90" 99mm	2.80" 71.1mm	2.95" 75mm	0.98" 25mm

\* Compatible Reference Cell Dimensions

These reference cell ovens (holders) are designed to elevate the temperature of the gas in the cells up to 80°C. Six different versions are offered to fit all of our standard cells.

Thorlabs also offers our TC200 temperature controller (sold separately; see page 857) to maintain the oven temperature. Each oven ships with cables that will connect directly to the TC200.

### Reference Cell Oven Controller

For More Information,  
See Next Page



ITEM #	\$	£	€	RMB	DESCRIPTION
GCH09-50	\$ 699.00	£ 440.40	€ 650.10	¥ 6,675.50	Oven for Ø9mm, L = 50mm Gas Cells
GCH09-75	\$ 599.00	£ 377.40	€ 557.10	¥ 5,720.50	Oven for Ø9mm, L = 75mm Gas Cells
GCH09-150	\$ 699.00	£ 440.40	€ 650.10	¥ 6,675.50	Oven for Ø9mm, L = 150mm Gas Cells
GCH19-75	\$ 710.00	£ 447.30	€ 660.30	¥ 6,780.50	Oven for Ø19mm, L = 75mm Gas Cells
GCH19-100	\$ 710.00	£ 447.30	€ 660.30	¥ 6,780.50	Oven for Ø19mm, L = 100mm Gas Cells
GCH25-75	\$ 740.00	£ 466.20	€ 688.20	¥ 7,067.00	Oven for Ø25mm, L = 75mm Gas Cells
TC200	\$ 524.00	£ 330.10	€ 487.30	¥ 5,004.20	Oven Temperature Controller

## Custom Reference Pyrex or Quartz Cell Capabilities

We can provide reference cells with different window materials, cell dimensions, and cell configurations. There are a variety of window materials that we have experience with. Cell windows can be made from BK7, IR fused silica, UV fused silica, or Sapphire. Cell size is not a problem. Custom cells have been ordered with cell diameters of up to 5" and cell lengths of over 5 feet. Additional customizations include windows at Brewster's angle, removable windows, cells sealed with a valve. Below are photos of some of the more complex custom cells.

This refillable cell can be attached to a vacuum and gas handling system, allowing researchers to vary the type and pressure of the gas in the cell. The valve that seals the cell can be made from either Teflon or glass. In addition, the windows on this cell are removable so that they can be swapped out for windows with different optical qualities or replaced if damaged.



OTHER GASES AVAILABLE	
Argon	Ammonia
Hydrogen Sulfide	Xenon
Neon	Helium
Propane	Bromine
Mercury	Thallium

The cell shown to the right is for a Magneto Optic Trap (MOT) and can be used for performing Bose-Einstein atom cooling experiments. This MOT cell is about 75mm in diameter.



The cell to the left is a Ø3" x 60" Iodine reference cell with Brewster-angled windows and is designed to be used as a filter in a telescope experiment.

