



- 7 Gallon Reservoir
- 3,000 BTU/Hr @ 28°F
- 1 Year Product Warranty
- Proudly made in the US

*Description*

**2/3 HP Glycol Chiller**

- **7 Gallon Reservoir**
- **3,000 BTU/hr @ 28°F**
- **56 dBA**
- **6' Power Cord**
- **110 – 120V / 3.9A / 450W**
- **18"W x 18"D x 31"H**
- **75 Pounds**
- **1 Year Product Warranty**
- **Proudly made in the USA**

Our glycol chillers are most commonly used for brewing applications, most of the information presented below is curtailed to brewing applications. However any application needing cold temperatures can utilize our glycol chillers. The chiller has a built-in controller to monitor and maintain the glycol reservoir at your desired set temperature. The cold glycol can then be pumped out (pumps not included) to cool a piece of equipment, or the reservoir can be used as a bath for laboratory type of applications. Our XL Glycol Chillers have a 2 part lid, the rear section has pass throughs for running 3/8" or 1/2" silicone tubing through along with additional ports to run the power cords through for submersible pumps.

While our chillers are perfect for maintaining fermentation temperatures and crash cooling, they should not be used to attempt to directly drop wort from boiling temperatures. There are a few ways to have a chiller assist in the knockout process, it typically involves a 2 stage cooling process. NOTE: the glycol returning to the chiller should never be allowed to reach more than 100° Fahrenheit.

**Chiller Comparison Chart – XL Glycol Chiller line**

<b>H P</b>	<b>Reserv oir</b>	<b>BTU/hr@28F</b>	<b>Electrical</b>	<b>Dimensio ns</b>	<b>Weig ht</b>
2/ 3	7 Gal.	3,000 BTU/hr	110 – 120V / 3.9A / 450W	18"W x 18"D x	75lbs
1- 1/2	15 Gal.	6,500 BTU/hr	110 – 120V / 7.2A / 830W	22"W x 22"D x	105lb s
2 H	22 Gal.	10,000 BTU/hr	110 – 120V / 10.3A / 1185W	24"W x 24"D x	125lb s

3-1/2	25 Gal.	16,500 BTU/hr	208-240V / 10.6A / 1ph /	28"W x 28"D x	150lbs
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### Sizing a Glycol Chiller for Brewing:

To size a chiller you need to determine what's the worst case scenario when it comes to how much cooling you'll need. While you could size a chiller to be able to cold crash all of your tanks at the same time, that's not how a typical brewery operates. 95%+ of our customers would be covered using our general rule of thumb for sizing (below the chart). The suggestions in the chart assume the fermenter is insulated with a neoprene jacket or better and ambient conditions are roughly 80F. If you will be operating in hotter conditions or without an insulated tank use the suggestion from the next sized up tank

Note: For the purposes of the chart "cold crashing" is only referring to the +/- 18hr period of active temperature drop. Once at a cold temperature use the "maintain cold" column for holding at cold temps to carbonate/clarify/etc. It's common for the industry to refer to any part of the cold process as the cold crash, but for chiller sizing there is a significant difference between dropping the temperature and holding cold temperatures.

Size	BTU needed for Cold crash	BTU needed to Maintain Cold	BTU needed for Fermentation
5 gal	350	100	50
10 gal	600	175	70
15 gal	850	250	100
1 BBL	1500	450	175
2 BBL	2600	800	325
3.5 BBL	3750	1200	500
5 BBL	5000	1500	650
7 BBL	6000	1800	800
10 BBL	7500	2000	900

15 BBL	10000	2300	1050
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We typically break down a setup into a block of 4 tanks. Tank #1 is cold crashing, Tank #2 is maintaining cold, Tanks #3&#4 are fermenting. If there are a mix of tank sizes, the biggest is the tank is the one cold crashing, and the next biggest is the one maintaining cold.

If you have more than 4 tanks, the cycle repeats. Tank #5 is cold crashing, Tank #6 is maintaining cold, tanks #7&#8 are fermenting. If there are a mix of tank sizes you first fill “cold crashing” spots from both blocks with the biggest and 2nd biggest tanks, then fill the “maintaining cold” spots with the next biggest tanks.

Tank#1 – Cold crash

Tank#2 – Maintaining Cold

Tank#3 – Fermenting

Tank#4 – Fermenting

Tank#5 – Cold Crash

Tank#6 – Maintaining Cold

Tank#7 – Fermenting

Tank#8 – Fermenting

Example: 1x 7BBL, 2x 5BBL, 1x 3BBL an 3x 2BBL tanks:

Tank#1 – 7BBL Cold crash = 6,000 BTU/hr

Tank#2 – 5BBL Maintaining Cold = 1,500 BTU/hr

Tank#3 – 2BBL Fermenting = 325 BTU/hr

Tank#4 – 2BBL Fermenting = 325 BTU/hr

Tank#5 – 5BBL Cold Crash = 4,300 BTU/hr

Tank#6 – 3.5BBL Maintaining Cold = 1200 BTU/hr

Tank#7 – 2BBL Fermenting = 325 BTU/hr

In this scenario the BTU/hr adds up to 13,975 BTU/hr, you can then use this number to select an appropriately sized chiller that provides at least this many BTU/hr.

### Recommended Glycol Mix

We recommend using a 35-40% glycol to 60-65% water mix for our brewing customers operating at approximately 28F. Other application may require a different mix depending on desired operating temperature.

#### Easy mix suggestions:

**1 Gallon of Glycol + 1.5 Gallon of Water = 40% Glycol Mix**

**1 Gallon of Glycol + 1.75 Gallon of Water = 36.3% Glycol Mix**

### Setup for Brewing Applications

With the controller on the the chiller set to 28F, you need a way to regulate the flow of cold glycol out of the chiller to each fermenter so that a variety of temperatures can be maintained across multiple fermenters. There are 2 main ways to accomplish this, our chillers can be used with either method.

- **One pump per fermenter:** A submersible glycol pump is put into the reservoir, tubing is run out to a single fermenter and back to the chiller. The pump is plugged into a controller that monitors fermenter temperature. The flow of cold glycol is regulated via the pump turning on/off as needed for that fermenter. We sell this style of pump/tubing/controller – see our glycol chiller accessory package.
- **Glycol Loop:** A single external continuous duty pump runs 24/7 to provide flow through a network of pipe in the brewery. There are solenoid valves on the supply line that are wired into a centralized control panel for the entire operation. The flow of glycol is regulated via opening/closing of the solenoids to provide glycol to a particular fermenter as needed. While our chiller will work for this type of install, we do not carry any of the products needed to setup a glycol loop.