



FermZilla Conical

Instruction Manual

(for 27L and 55L models)

This instruction sheet contains vital information that is related to the safe usage and handling of the FermZilla Uni Tank. It is vital that you read this instruction sheet from front to back before using the product! THIS IS FOR YOUR OWN SAFETY



Ferment, Clarify, Dispense. The uni tank that does it all.



WARNINGS

1. When not under pressure do not expose to liquids above 55°C (131°F). Only clean, wash or sanitise the fermenter with cold water.
2. When under pressure do not expose to any temperatures above 35 °C (95°F).
3. Keep the fermenter out of direct sun or heat. Do not expose to UV rays of any sort.
4. If you are using a heat belt to warm the fermenter then only have the heat belt sitting below the liquid level. Do not use an unregulated heat source, only use heat sources which are plugged into a temperature controller.
5. Under no circumstances apply more than 2.5bar (35PSI) to the fermenter tank and do not connect an unregulated pressure source. If you connect external pressure source ensure it has independent PRV pre-set to 35psi or below.
6. A spunding valve set below 35psi must always be connected to the FermZilla when fermenting under pressure or connected to the recipient keg when performing a closed transfer.
7. Do not tamper with the pressure relief valve. Only use the red colored pressure relief valve supplied by KegLand.
8. If a vigorous fermentation is experienced and krausen or wort has contacted the PRV, ensure to remove the PRV and clean it before putting the FermZilla under pressure.
9. If the fermenter is scratched, damaged or has been under any physical duress; do not use the fermenter under pressure.
10. If you use the fermenter under pressure hydro test the fermenter every 24months to ensure it is safe to use.
11. Do not use Sodium Metabisulphite or Stellarsoda in the FermZilla. Only use chemical cleaners and sanitizers that are approved by Kegland. These include: a) Super Kill Ethyl Sanitiser Spray (effective for sanitising the exterior of the FermZilla) ([KL05371](#)) b) StellarSan (mixed to the correct specification) ([KL05357](#)) c) StellarClean (not to be left in the FermZilla for more than 30 minutes) ([KL05494](#)) ... Or contact <https://www.kegland.com.au/> for more information regarding other compatible chemical cleaning products.
12. Keep the butterfly valve always open during fermentation. Only close the butterfly valve once fermentation has ceased and hydrometer readings are stable for 3 consecutive days.
13. Open the butterfly valve and ensure the system (including the collection container) is depressurized prior to removing the collection container.
14. Do not over tighten carbonation caps onto the threads of the lid or collection container, doing so could result in the thread being stripped. We recommend using the plastic carbonation and line cleaning caps ([KL10788](#)).
15. Do not over tighten the stainless-steel handles onto the neck of the FermZilla.
16. Avoid lifting the FermZilla while full. If filled with wort avoid moving the FermZilla to prevent sticky wort from preventing the PRV from operating.
17. Always conduct a leak test prior to beginning fermentation.

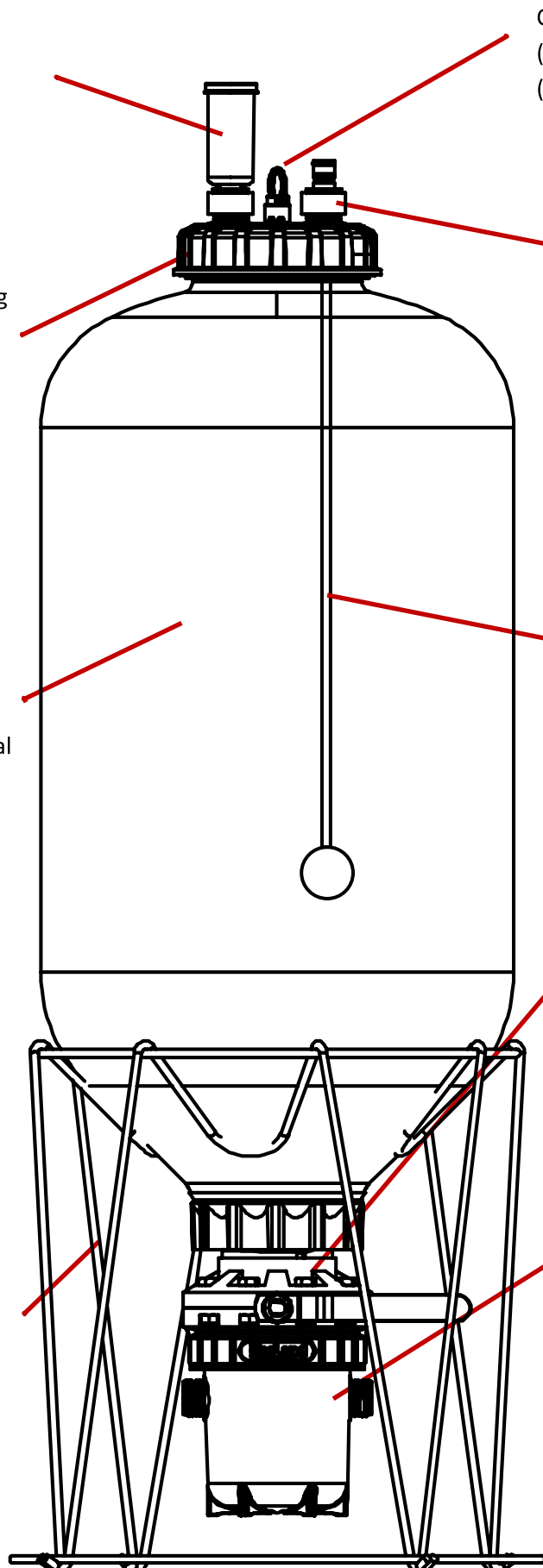


Three Piece AirLock
([KL01595](#))
&
Black Cap & Fitted Gromet

Threaded Lid Ring
([KL11396](#))
&
Flat Lid
([KL11402](#))
&
Lid O-Ring
([KL14267](#))

Replacement FermZilla Conical
Standard Tank
([KL11327](#) – 27L PET)
([KL11334](#) – 55L PET)

304 Stainless 8 Leg Stand
([KL11419](#))



Cornelius Type Pressure Relief
(PRV) RED 35psi/2.5bar
([KL05333](#))

Liquid/Gas Ball Lock Post
Carbonation Cap Assembly
([KL10788](#) – Plastic)
([KL00826](#) – Stainless)

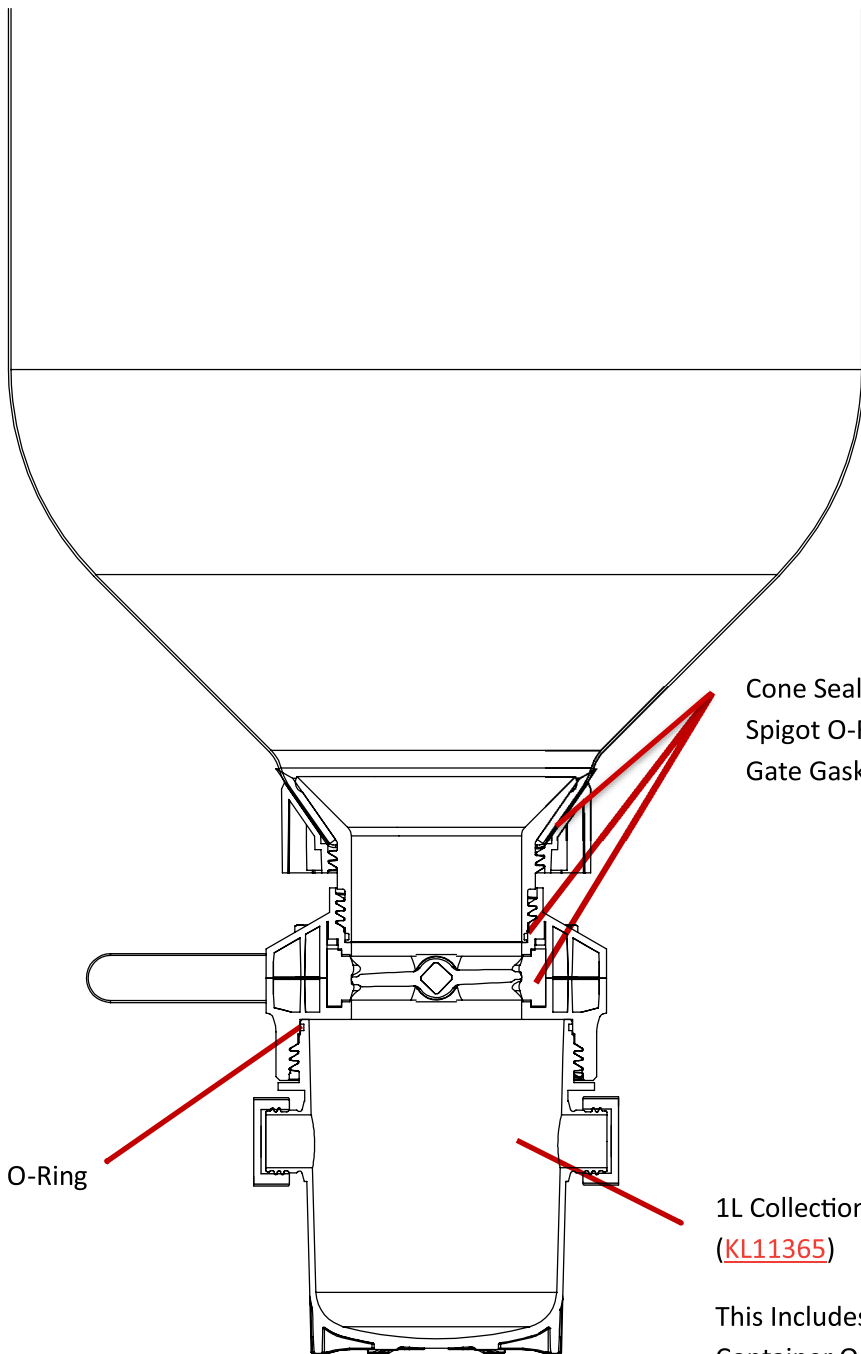
*NOTE: This is sold separately as
an upgrade the starter kit. This is
recommended for fermenting
under pressure. Standard plastic
bottle caps can be used here too.*

Silicone Dip Tube & Stainless
Float Assembly for 55L and 27L.
([KL14076](#))

*NOTE: This is sold separately as
an upgrade the starter kit. This is
recommended for fermenting
under pressure.*

Butterfly Dump Valve Assembly
([KL11464](#))

1L Collection Collection
Container with Lid, Caps and
O-ring)
([KL11365](#))



Cone Seal ([KL11457](#))
Spigot O-Ring (KL12706)
Gate Gasket (KL12713)

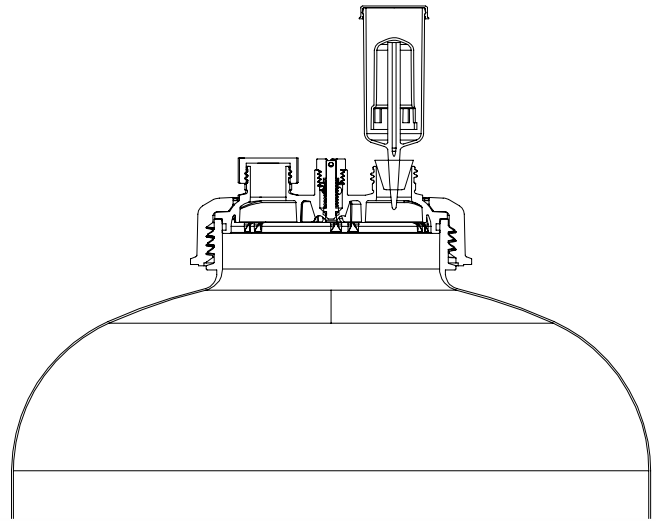
Collection Container O-Ring
([KL14267](#))

1L Collection Container
([KL11365](#))

This Includes Collection
Container O-Ring and Lid and
Caps

FermZilla – Lid Assembly

1. Ensure the lid assembly has the o-ring attached.
2. Apply some food grade lubricant to the o-ring to extend the life of this o-ring and threads. Adding lubricant will also improve the sealing ability of the o-ring.
3. Place the lid onto the neck of the tank and screw down the threaded lid ring.
4. Use one of the bottle caps to close of one of the holes in the lid.
5. Ensure the Red PRV is placed into the pressure relief valve.
6. Push the three-piece air-lock into the silicone bung then push both parts into the remaining hole in the lid.



FermZilla – Dump Valve Assembly

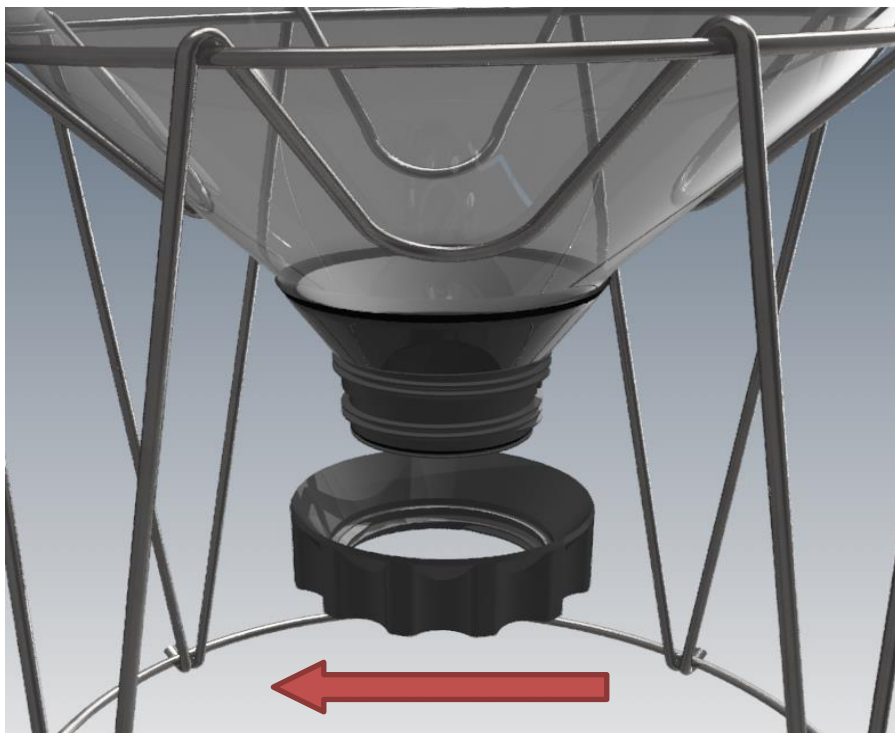
1. Ensure the double threaded spigot has both the o-ring around the base and the cone shaped seal around the conical part of the threaded spigot. (see below)



The cone shaped seal is to be placed between the spigot (above the thread) and the inside of the FermZilla tank. **Do not** place the cone shaped seal on the outside of the FermZilla as doing so can result in it getting jammed in the thread between the spigot and spigot collar.

2. Once the threaded spigot sticks out the bottom of the FermZilla use the thread ring to secure the spigot onto the tank.

NOTE: This is a **LEFT-HAND THREAD**. This has been designed with a left-hand thread so it does not come undone when you tighten the Butterfly Valve Assembly onto the Dump Valve Adaptor. Do up the Thread Ring hand tight. This should be all that is required to get a good seal. (see right) This has been designed so that when pressure increases inside the tank the seal pushes harder against the tank. For this reason, it is not important to overtighten this part of the fermenter. A small amount of keg lubricant can help make it easier to thread.



3. Locate the butterfly dump valve and screw this onto the spigot. This is a **RIGHT HAND (regular) THREAD**. Screw this onto the spigot firmly. Once again do not over tighten this fitting as additional tightness will not improve the sealing performance. A small amount of keg lubricant on the o-ring can help ensure your o-rings stay in good shape, seal well and screw on securely.

NOTE: When the handle on the butterfly dump valve is horizontal the gate is closed. When the handle is in the vertical position the gate is open.



FermZilla – Dump Valve Disassembly

The FermZilla dump valve assembly can be disassembled to allow for thorough cleaning or o-ring maintenance. Sometimes this assembly can be difficult to remove if over-tightened but can be undone following the correct method. Because the diameters of the fittings are large, the forces required to seal the fittings are much higher, so at times can be difficult to undo.

Disassembly can be done through the following steps:

1. **Tightening the body coupling:** first, ensure the spigot's collar is tightened down securely, so that when you undo the valve part, it doesn't freely spin in the body (remember, this part is left-hand threaded). One trick to get the collar up super tight is to pressurise the vessel before tightening. This will push down the spigot and bulge the vessel enough to screw down the collar even tighter, it will also make the body easier to grip. The KegLand Adjustable Easy Opening Tool is handy for ensuring you tighten it as far as it can go and ensuring the fittings are dry will ensure they don't slip. At no point use the valve itself to tighten this, as it will only make step 2 harder. Once tightened, depressurise the vessel.
2. **Unscrewing the vale:** with the spigot assembly securely tightened, grip the body of the fermenter and firmly twist off the valve part of the assembly counter-clockwise.

One trick to make this easier with only one set of hands is to secure the handle of the valve in the FermZilla frame and twisting off the body instead (see picture to the right). If the spigot assembly spins freely in the body of the FermZilla, repeat step one.

Alternatively, if you have the steel handles securely mounted to the top of the vessel, you could also use these handles to lock into the frame again to allow you to turn off the valve.

3. **Unscrewing the body coupling:** Now that you have successfully removed the butterfly valve, you can proceed with removing the body coupling/spigot assembly. Remember, this is a left-handed thread, so turn the fitting off clockwise.

The trick to getting the entire assembly apart is ensuring the spigot collar is tight enough in the first place that it doesn't spin when attempting to screw off the valve.

Please refer to this [instructional video](#) for a visual demonstration of how to do this process.

FermZilla – Collection Container

The collection bottle has several uses. Its primary function is to collect and harvest yeast however it can also be used for other purposes such as:

1. Reagent Bottle
2. Dry Hopping Bottle
3. Beer Sampling Bottle
4. Collection and disposal of unwanted trub or hop material
5. Carbonation of small samples of product
6. Yeast culturing container

The FermZilla collection container has also conveniently manufactured with heat resistant Tritan plastic meaning it's not only robust and chemical resistant, but also heat resistant and will handle extended contact in hot water 100°C (212°F)

FermZilla – Collection Container Assembly

1. It is suggested to first apply food-grade lubricant to the o-ring on the collection container. Suitable lubricant can be sourced on our website ([KL07221](#)).
2. Screw the lubricated collection container into the thread on the bottom of the dump valve assembly.
3. Tighten with the collection container removal tool ([KL14250](#)). Make sure to not overtighten, tighten just enough to form a leak-proof seal.

Collection Container Correct Tightness



FermZilla – Collection Container Disassembly

1. Prior to removing the collection container, open the butterfly valve and release the pressure in the vessel by pulling on the pressure relief valve on the lid of the FermZilla until all the gas is evacuated.
2. Close the butterfly valve if there is liquid in the FermZilla.
3. Using the collection container removal tool to rotate the collection container clockwise to loosen the container.

FermZilla – 304 Stainless Steel Handles Assembly

1. Insert a bolt into a hole of each of the handles.
2. Screw a nut onto the bolt. Don't tighten this nut yet.
3. Place the handles around the collar of the FermZilla as shown in the image to the right.
4. Insert the second bolt into the remaining holes on the handle and screw the remaining nut onto this bolt.
5. Tighten the two nuts while holding the bolts to prevent them from spinning. Do not overtighten as it can warp the opening of the FermZilla. The handles should be able to freely rotate around the neck of the FermZilla. If they cannot rotate then it is too tight.



NOTE: It is suggested to orientate the handle during assembly such that the exposed thread of the bolt furthest away from you is oriented to the left such that when undoing the collar of the FermZilla it reduces the risk of hitting your hand on this exposed thread of the bolt. This orientation is shown above to the right.

Yeast Harvesting and Trub Dumping:

6. In order to harvest yeast simply screw the yeast collection bottle onto the Butterfly Valve. You can insert this bottle right from the start of fermentation.
7. Fermentation is no different to any other fermenter. Once the wort is inside the fermenter pitch yeast as you would normally.
8. Once the collection bottle has been fitted open the butterfly valve yeast can fall down into the collection bottle. The butterfly valve is open when the handle is facing in the vertical direction and it's off when it's in the horizontal position.
9. By chilling the fermenter this will accelerate the process of the yeast falling out of suspension and it will greatly speed up the clarification process. The easiest way to chill the FermZilla is by fermenting in a dedicated fermentation fridge.
10. Once the bottle is full of yeast you can re-cap and store in the fridge for your next brew or discard, rinse and sanitise if you just want to dump the trub.

Cleaning the FermZilla:

1. Remove the FermZilla collection container and the lid.
2. Rinse the walls of the FermZilla vessel, collection container, lid and butterfly valve (including the external face and threads of the butterfly valve) with cold water. A garden hose is particularly useful for rinsing and dislodging yeast/hop matter.



3. Use a non-abrasive cloth to remove any stuck on particulate matter from the walls of the FermZilla, lid, collection vessel and butterfly valve.
4. Close the butterfly valve and leave the collection vessel unattached.
5. Clean the collection vessel by filling it with cold water and Stellarclean according to the instructions on the tub, attach the lid and shake to dislodge any yeast/hop matter.
6. After 30 minutes of soaking with Stellarclean, gently wipe away any soiling with a soft cloth. Make sure not to use harsh scrubbers that may scratch the plastic and create ideal places for batch-ruining bacteria to hide.
7. If there is a large amount of hops or yeast coating the walls of the fermenter it is best to perform a longer overnight wash using Stellaroxy.
8. Remove the lid and drain the Stellarsan by opening the butterfly valve and then rinse using cold water.
9. Fill the FermZilla and collection vessel with cold water again and add Stellarsan according to the instructions on the tub. Reattach the lid and shake the full FermZilla to coat all surfaces.
10. Stellarsan can be left in the vessel until the next fermentation.

NOTE: Following adding Stellarclean and Stellarsan the FermZilla can be pressurised (if the pressure kit, [KB02113](#) or [KB01609](#), is attached) to push cleaner or sanitiser into the crevices of the dump valve assembly to get a more thorough clean.

Cleaning the PRV:

If krausen or sticky wort has contacted the PRV you will need to clean the PRV to ensure it still activates at 35psi.

This can be easily done by releasing the pressure in the FermZilla by pulling on the ring pull until no pressure is left in the vessel, then unscrew the PRV.

Submerge this PRV in stellarclean solution to remove any sticky residue. Once all the residue has been removed, sanitise the PRV with stellarsan or ethyl kill solution and screw back in to the pressure lid.

Using the FermZilla without pressure:

The FermZilla's were designed to be used optimally with a source of CO₂ pressure. While they were not designed with gravity-only operation in mind, there is some workaround that will allow you to get most of the FermZilla's benefits without a source of CO₂.

Taking hydrometer samples and bottling:

By attaching a ball lock post to the bottom of the collection jar, you now have a variety of removable options at your fingertips. You can connect a sanitised picnic tap (KL00963) mounted to a disconnect (to allow to take hydrometer samples. Simply slip some 10mm hose over the end of this and you now have a simple bottling gun! Just make sure the FermZilla is elevated so that gravity can carry your beer down to the bottle. You may need to squirt out some of the trub and yeast sediment before getting clear beer. Crash cooling will make the trub compact faster.

Using the FermZilla under pressure:

Fermenting under pressure:

Some people believe that beer that is naturally fermented under pressure is the traditional and best way to ferment. Almost all large commercial breweries inherently ferment under some degree of pressure due to the fact that they have tall tanks and the pressure at the bottom of the tank is significant even if no pressure has been applied to the headspace of the tank. With the FermZilla it's possible to ferment at higher temperatures, faster speeds and produce cleaner beers. Not all beer styles should be fermented under pressure, as some beer styles such as saisons and Belgian ales benefit from non-pressure fermentation to produce the ester and phenolic flavours classic to these beer styles. In order to perform pressure fermentation, you will need to purchase the following additional parts:

- 2 x Carbonation caps. We would advise getting one red plastic carbonation cap ([KL10788](#)) and one yellow carbonation cap so you can differentiate which carbonation cap has the dip tube attached to it.
- 1 x Silicone dip tube with stainless float ([KL09241](#)).
- 1 x Duotight – Blowtie 2 Spunding Valve ([KL15042](#)) or Blowtie spunding valve kit ([KL09706](#)).

This blowtie spunding valve should be set at your desired fermentation pressure and should not be set above 35psi. When the vessel is under pressure **do not** expose it to temperatures greater than 35°C (95°F).

When fermenting under pressure you must not close the butterfly valve during fermentation if you have wort in the collection vessel which has not finished fermenting. Only close the butterfly valve once fermentation has ceased and hydrometer readings are stable for 3 consecutive days.

When removing the collection container for example when dumping trub or yeast make sure to open the butterfly valve and ensure the system (including the collection container) is depressurized prior to removing the collection container.

Pressure Transfers:

Easily avoid oxygen getting into your beer and staling it prematurely by transferring under CO₂ pressure in a closed loop system straight to your kegs! Oxygen is the enemy of beer, by going straight from the floating dip tube on the FermZilla to the liquid post on your keg, you can be sure your precious beer won't come into any contact with the outside out.

A pressure transfer will require an external CO₂ source such as a CO₂ cylinder ([KL01489](#) or [KL01496](#)) and a MK4 regulator ([KL07429](#)) or a Sodastream cylinder ([KL08631](#)) and mini 360 core actuator regulator ([KL15868](#)).

It is best to attach a spunding valve to the gas (IN) post of the keg and set have a small pressure difference between the FermZilla and keg at the start of the pressure transfer to avoid excess foaming of the beer during the transfer. Later in the pressure transfer you can increase the pressure difference between the keg and FermZilla by opening the spunding valve further to release more pressure.



GREAT TIPS TO GET YOU STARTED

1. **No need to do a whirlpool in your kettle**

Due to the fact that you now have a conical fermenter there is no need to do a whirlpool in your kettle. Once your wort has cooled you can dump all trub and hop material from your boil into your fermenter. The boiled hops and trub will settle out in the cone quickly and you can easily dump this directly from the butterfly valve. The clear tank wall will enable you to separate clear wort from trub far more easily than in your kettle and collect the trub into the collection jar.

2. **Dry hop without compromise**

Traditionally, most home brewers who want to dry hop are forced to remove the lid of the fermenter to insert hops. Removing the fermenter lid increases the risk of contamination and it also introduces significant amounts of oxygen to your fermented beer. You can avoid these issues by dry hopping with the collection bottle. After yeast has been collected and the butterfly valve is clear of debris, simply fill the collection bottle with your favorite hop and re-fit this to the butterfly valve. The hops will float up through the beer and introduce a fantastic hop aroma.

Note: If you have a CO2 cylinder you can also purge the oxygen out of the hops before connecting to the butterfly valve.

3. **Make yeast starters in the collection container**

You can make up to 900ml starters in the microwave, boiled directly in the collection jar! Simply remove the collection jar o-ring (not microwaveable and needs to be removed to allow for steam to exit) and any lube, put your starter wort in there and rest the lid on top of the jar (don't screw the lid down and make sure you're using plastic bottle caps on the accessory ports) before microwaving on a lower power setting. After boiling for a minute in the microwave, remove, add back on the oring, throw in a sanitised stir bar and place some sanitised foil over the opening before allowing to cool. Pitch yeast and place onto stirplate.