

The petainerKeg USD format can be filled on many suitably modified steel Keg-Fillers.  
Please contact the filling machine supplier for advice, format parts and program modifications.

When using the petainerKeg USD format, please note the following:

## General

Modify the machine program in accordance with the instructions below:

1. All steel Keg washing and sterilising functions need to be inhibited, including the “head seal check” and the spear adaptor moving, except on the filling head.
2. Keg must be filled volumetrically to the required capacity to provide head space.

## Racker Conversion

1. Check that the filling head spear adaptor (piston top) dimensions comply with the Petainer closure drawing. Failure to do so may damage the closure and prevent its proper operation!
2. Mount a plate/disc below the Keg clamp to apply pressure evenly across the USD packaging.
3. Maximum allowed clamp pressure is:
  - a. 30 l USD: 1600 N (360 lbf)
  - b. 20 l USD: 1300 N (292 lbf)

## Filling

1. We recommend disinfecting the fitting surface before filling (e.g. with 70% alcohol).
2. Purge/rinse the Keg with CO<sub>2</sub> (or other appropriate inert gas) to remove air from the Keg prior to filling.
3. **By request** we deliver the USD with >99% N<sub>2</sub> inside.
4. Keg counter-pressure and filling (maximum pressure 3 bar / 43.5 psi) can then proceed as normal.

## Intermediate head rinsing

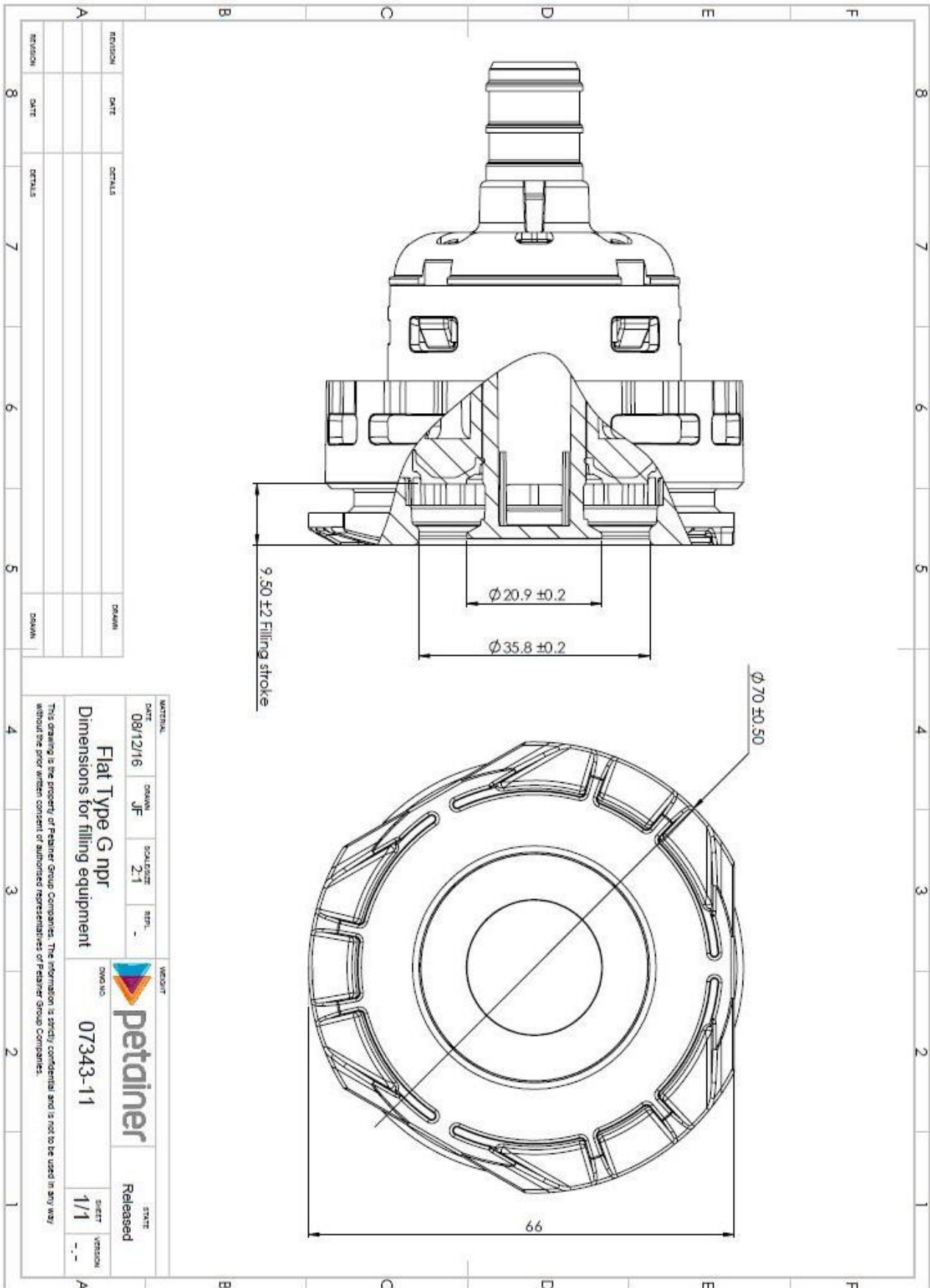
If the racker design allows, it is desirable to flush/disinfect the filling head and each keg valve from outside before and after filling.

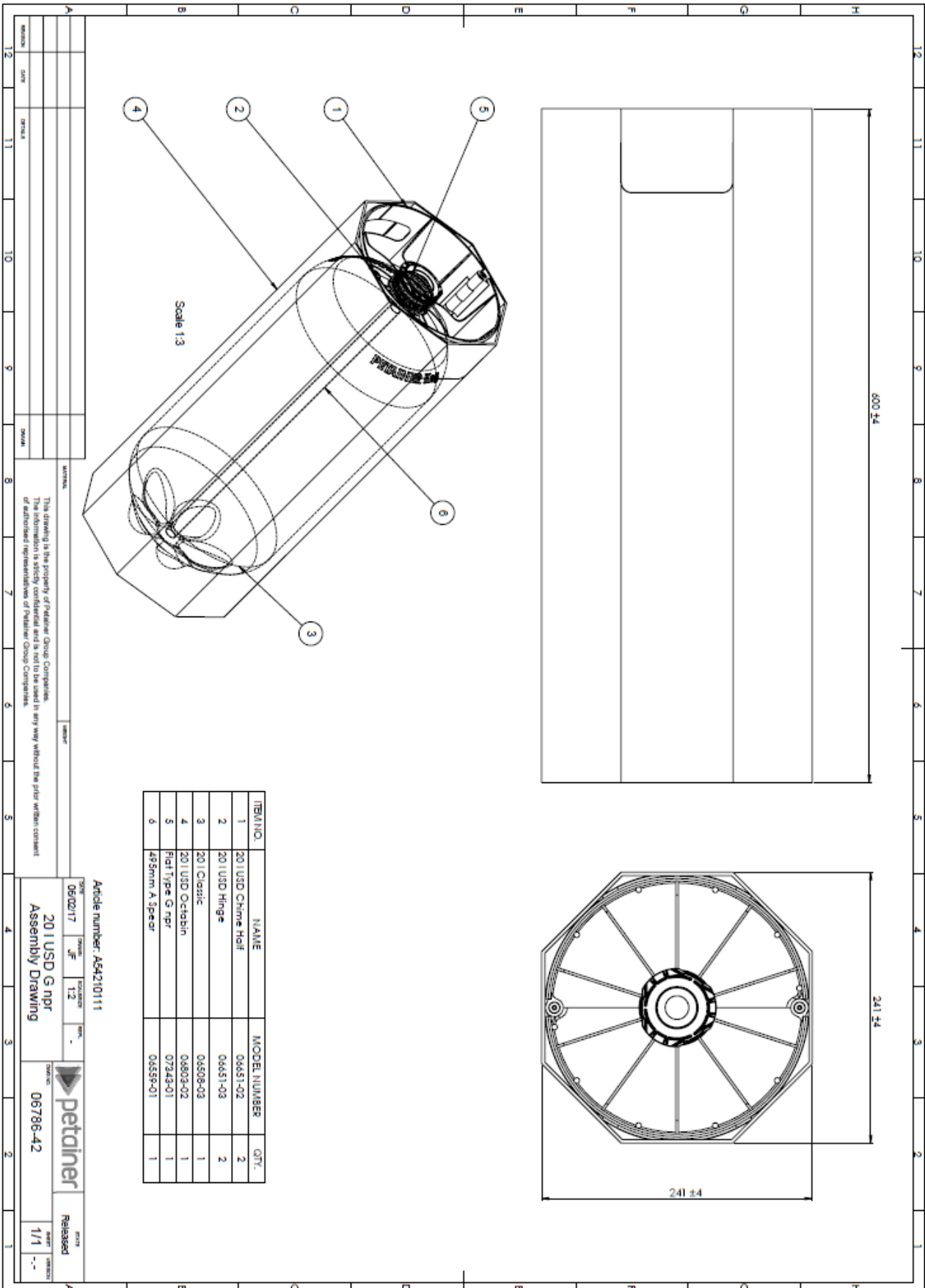
1. e.g. with hot water (1 second with 85°C / 185 F).
2. Water pressure before filling maximum 0.5 bar / 7.25 psi.
3. Water pressure after filling should not exceed the pressure in the Keg.

## Safety

1. All machinery must be guarded in accordance with local regulations.
2. Eye and ear protection, together with work-wear should be used.
3. PET Kegs can burst when damaged by sharp objects.
4. Under filled Kegs or other rejects should be de-pressurised prior to disposal, using the Pressure Release Tool (PRT) supplied.







G npr = G-type without automatic pressure relief function

